SHOOLINI UNIVERSITY SOLAN, HP

SELF STUDY REPORT

Shoolini University

PART-I
University Profile & Criteria-wise
Evaluation - June 2015

Submitted to
National Assessment & Accreditation Council (NAAC)
For Assessment & Accreditation

Table of Contents

Statement of Compliance

List of Annexures

Preface

It is my privilege to present the Self Study Report (SSR) of Shoolini University of Biotechnology and Management Sciences, short title: 'Shoolini University' (established 2009), to the National Assessment and Accreditation Council (NAAC).

At the outset, I would like to highlight that Shoolini University aspires to be in the Elite Club of the **'Top 200 Global Universities.'** I understand that being a 'young' institution, this is an 'Audacious' goal, especially considering the fact that there is no Indian University, Public or Private in this Premier list. Despite the magnitude of this task, I am confident of my team's ability to deliver.

The genesis of the Shoolini Dream has its roots in my visits to South India in 2003 as the Chairman of the All India Coordinated Research Project on Agroforestry. I was deeply anguished by the approach adopted by private professional colleges of relegating the crucial aspect of research. I firmly believe that No Institute of Higher Learning can become great without Research. It was this concern that sowed the seeds for setting up a Specialized Research Based Private University, and in so doing, provide a role model for Higher Education in India.

Having experienced bureaucratic limitations as a Vice Chancellor of a Public University, and extrapolating this with the overwhelming Preeminence Private Universities enjoy over Public institutions world-wide, reinforced my conviction that the ability to effect quick decisions was the key differentiator. To illustrate, I am told that Harvard College, a non-discreet institute in Massachusetts which was at the verge of closing down, re-invented itself 150 years ago by adopting the Choice Based Credit System, injecting Academic Freedom with other Innovations. It was the ability to do so without bureaucratic encumbrances that was the game changer. The result is visible - the Howard University as we know it today.

With this thoughts playing at the back of my mind, I decided to resign from my position of Senior Scientific Advisor to the Government of Himachal Pradesh, with the single minded mission to build a research focused Private University. I need to underline that this was the vision of an idealistic academician-researcher, who neither had the backing of a business house or a philanthropist with deep pockets. Nevertheless, there were friends and well-wishers who not only helped kick-start the project but continue to support the journey.

In order to develop an institution of global standards, we drew a time bound developmental plan, which stretched over twelve years. The edifice was built on five fundamental pillars – Transparent Governance, Distinguished Faculty, Good Infrastructure, Strong alliances with Industry and the Corporate Sector and Deep

Academic linkages. As part of our plan, we decided to focus on Research and concentrate on developing scientific solutions for Himalayan sustainability.

Over the years, our reputation as a premier institution of learning and becoming a frontrunner in crucial fields of research and academics has witnessed an upward surge. The University was ranked 2nd in a row, in 2012 and 2013, among top private biotech institutions in the country by BioSpectrum, a prestigious national magazine on biotechnology, improving upon our earlier ranking. Shoolini has been included in the category of India's Most Admired Science and Technology Universities, among a total of 62 listed out of 693 universities considered for ranking by C-fore, a Delhi based market research and opinion polls company. In addition, we have been acknowledged 'Best Emerging Private Business Schools' in India by ASSOCHAM along with a host of other accolades. The recent ISO certification is yet another feather in the cap.

While reaching the half-way stage in our quest, the encouragement of Dr. APJ Abdul Kalam, former President of India, provided great fillip to our dream. On the occasion of Shoolini University's First Convocation, he remarked: **"Why 200, why not the Top 100? It may be difficult but not impossible; go ahead with passion and persuasion."**

In order to compete globally, we have carried out an in-depth analysis of the ranking systems. The Times Higher Education (THE) emphasizes on research achievements and calls for two hundred research papers 'consecutively' for five years published in Scopus and Thomson & Reuter indexed journals to become eligible to apply. I am happy to say that in the year 20014-15, Shoolini University has reached the half way mark. The University's **'h' index of 14** based on research citations of its publications stands second best amongst the private universities established after 2008 in the region. The other two ranking systems, namely QS (Quacquardelli Simonds) and the Shangai; Jai Tong University emphasize on societal benefits along with teaching, research and transfer of technology–areas where we are already contributing, albeit, in a limited manner.

In essence, the five faculties of the university: Biotechnology, Pharmaceutical and Basic Sciences, Management Sciences and Liberal Arts, Engineering and Technology are unified by a 'research-driven' model focusing on the sustainable development of the Himalayas and at the same time, to develop high quality human capital with competencies to fulfill the requirements of the industry and society globally. The university offers programs and courses in a variety of subjects and disciplines, and this promotes cross-pollination of ideas and generates the potential for cross-disciplinary collaborations.

The Doctoral program of any university is the litmus test of quality of research. In order to come at par with the rest of the world, Shoolini employs the services of at

least external examiner from outside the country – ideally from the USA, Europe or technologically advanced countries of Asia. It is also mandatory for scholars to publish two papers in the Scopus and Thomson & Reuter category of journals.

In consonance with the NAAC and in keeping with International trends, the University gives weightage to extension activities, innovations in teaching pedagogy, competence of faculty, knowledge generating tools, development and application of in house software solutions, student facilities and skill development. Under the INSPIRE program sponsored by the DST, the University has given exposure to over five thousand budding scientists.

In keeping with global trends in Higher Learning, The Yogananda Library of the University has been transformed as a **'Knowledge Centre,'** aimed at making it a pro-active knowledge partner of our students. The Learning Management System **(LMS)** developed for the eUniv platform has provided an ever available tutor for students to revise class room teaching, while the Knowledge management System **(KMS)** has provided a vast repository of resources for higher learning and research. I am proud to say that both the LMS and the KMS have been developed 'in-house,' adapting freely available software.

The SPRINT Program was started as a pilot project to develop Soft and Technical Skills in Shoolini's students who essentially hail from rural and semi- urban parts of the state to make them employable, has been a major success. In view of its spectacular results, the course has been spread across the campus.

This SSR would underscore the fact that the institution shares the core values defined by NAAC, and this would emerge throughout as we endorse them- both in letter and spirit. My team remains passionate to make Shoolini University a coveted destination for higher learning within the South Asian Region and a globally admired Center of Research, specializing in the various facets of the Himalayas. At the same time, I am seized with the challenges and acknowledge there are several limitations and shortcomings as I would bring out in the SWOC Analysis. As a team, we remain committed to fructify the vision and I am confident that we would do it - however, difficult it may be.

Before moving to the SWOC Analysis, I would like to thank the NAAC and the Appraisal Team. I am sanguine that with the advice and recommendations from NAAC, we would be able to bridge the gap(s).

(P.K.Khosla)
Founding Vice Chancellor

Date: 28 June, 2015

STRENGTH-WEAKNESS-OPPORTUNITIES-CHALLENGES (SWOC) ANALYSIS

Prof. PK Khosla
(Founding Vice Chancellor, Shoolini University)

The SWOC analysis as given in subsequent paragraphs encapsulates major points and issues which are considered to be Shoolini University's intrinsic Strength and Weaknesses, Opportunities and future Challenges.

As the Founding Vice Chancellor, I have been forthright as I view this exercise as an opportunity for Introspection, Review, and where required, to effect Mid-Course Correction(s). It is for this reason, that I have appended a framework of how the institution was brought to its current level, and more importantly, the direction of our future endevours.

STRENGTHS

Institutional Vision-Will-Determination

In my opinion, Shoolini's biggest Strength emanates from our determination to excel in academic repute and outshine in the quality of research, and by so doing, be counted in the elite club of Premier Institutes globally. Adding objectivity to this ambitious vision is the defined timeline of 2022. The fact that this vision is shared by the Trustees, Management and more importantly, by our faculty and staff who are the life and blood of this institution, remains a major support.

Expressing such a lofty mission six years back, at the time Shoolini started on its journey was preposterous in academic circles. However, by 2015, the University has emerged 124th out of the 693 Universities of India (as per C- fore's latest survey of Indian Universities), and simultaneously emerging as a premier institution in the state, reinforces my conviction.

Research and Development

Shoolini's focus on research and development across Schools and our success to date, is our second biggest strength.

It has always been my firm belief that no University can become great unless it excels in research. Quality research attract quality faculty who in turn attract best students. Faculty and students are the foundation of any institution - Bricks and mortar follow.

Shoolini University, right from the start chose a 'Research Driven Model" - very unique to institutions in the private sector. As we built Shoolini, it was felt that

firstly, my own research experience would add to value. Secondly, while this does not detract from the mission of providing 'quality education,' research perse would enable the institution to progress faster. It was for this explicit purpose that emphasis on research infrastructure and developing the human capital was proportionately greater – this bias is now bearing fruit, substantiating the decision.

In the short journey of the University thus far, there has been infusion of substantial government funds for research (over 15 Crores). With twenty-two (funded) labs, over a dozen patents and an 'h' factor of 14, Shoolini has emerged as a leading contender in the list of 'Most Admired Science Universities,' a distinction that places it heads above its contemporaries in India.

These achievements have been possible because of an institutional decision of nurturing a well-qualified faculty. This facet of the University therefore stands out as a major strength, an asset which is expected to blossom in the years to come.

Himalayan Sustainability: A Powerful and Unifying Research Theme

Nested in the Mid Himalayas and enriched by an ever expanding research capital, be it in the spectrum of Sciences, Engineering or Management, Shoolini University has developed intrinsic strengths to address the myriad issues that afflict the Himalayan Region. With a fragile eco-system and growing industrialization-exploitation, the Himalayan ecosystem is undergoing tremendous strain; cloud bursts in Ladakh, and Uttrakhand and the recent devastation due to the earthquake in Nepal stand testimony.

Shoolini's strategic location and growing expertise in the fields of research provides a unique opportunity for it to provide strategic direction and scientific and/or technological solutions to harness the wealth in an eco-friendly manner.

It is in keeping with these strengths that the International Center for Integrated Mountain Development (ICIMOD), Kathmandu has welcomed Shoolini University as a Fellow of the Consortium of Himalayan Universities. At the same time, we have also partnered with Lanzou University, China, located in the far east of the Himalayan Mountain Range. Shoolini University has thus laid the foundation of giving back to nature and mankind. This therefore qualifies as our strength that has exponential potential and a socio-economic agenda that needs to be pursued.

Visible Impact Within Five Years

Shoolini University started with a belief in quality – both in terms of human and material resources, and it resolved that 'whatever is done, however small, should be of highest order.' The fact that the institution has been able to gain a position of eminence in research and academics in a short span of five years qualifies as a

major strength – something on which the next stage of development can be undertaken.

In addition to rankings by various independent bodies, Shoolini's campus is one of the best landscaped; being located in salubrious pine forests adding to its sylvan elegance. Its library – Yogananda Knowledge Center is housed in an iconic building that has received architectural awards. Facilities like an Indoor Stadium, Adventure Camp and Cineplex are not generally seen in private universities, and are assets that add value to our campus.

Innovation through SPRINT and Yogananda Knowledge Center

The SPRINT (Skills Progression through Rapid Intensive and Innovative Training) program was initiated to provide accelerated learning to rural and semi-urban youth – the human material in terms of Shoolini's students with the intent of raising their employable threshold.

Apropos, the program was developed as a blend of Soft and Technical Skills and patterned on the lines of Stanford University's Mini MBA. SPRINT has been phenomenally successful in creating employment as well as personal and professional growth of students and has become of our biggest strengths. Started as a pilot project for MBA students, the program has now been expanded to all Schools across the University. At the same time, SPRINT has the potential to be extended beyond the campus – both as an extension and consultancy.

The transformation of the Yogananda Library as a pulsating Knowledge Center is also bringing a paradigm change in the manner learning and research is conducted at Shoolini. Powered by an 'in-house' software adapted from freely available sources, the LMS makes classroom learning available on a click. The system has been designed to supplement learning for Shoolini students and has the potential to be extended worldwide, enhancing the reach of the University exponentially. Buttressing this learning platform, is the KMS (Knowledge Management System) that aids, augments and enriches research.

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WEAKNESSES

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Institutional Resistance Impeding Progression of Private Universities

Notwithstanding the acknowledgement of the potential from quality private universities as has been proven in the USA, the state's support system remains predisposed in favour of public institutions. While being Private brings in simpler and faster decision making - being a private and not a public University adds to a significant disadvantage to Shoolini University, especially as we compete for government sponsored project funding.

As an example, the FIST grant extended by the DST for supporting lab infrastructure is pegged at 50 percent for private universities as compared to 100 percent for public universities.

It is submitted that if India has to replicate the success of private education abroad and en-cash on her demographic dividend – a level playing field is required to be ensured; this translates to equal support and balanced regulations.

International Students and Faculty

Despite Shoolini University's vision and significant effort towards developing global alliances and institutional linkages, the pace of getting international students and faculty to Shoolini has been slower than what we had anticipated. While Shoolini University has developed over a dozen partnership programs with Universities in China, Taiwan and South Korea and 36 students have undertaken a semester exchange program from our side, in exchange, there has been only one student and one teacher who has availed the offer of reciprocity.

This could partially be a result of the location of the University, which is over 300 Kms. from Delhi. Our location which is a strength for harnessing Himalayan bio-diversity becoming an impediment.

While upping the momentum is required, we also need to publicize our ability to deliver quality education and research at a fraction of the cost of the west - this requires a concerted and sustained effort. At the same time, we need to raise the bar in terms of accommodation and facilities and bring them at par with those foreigners are used to. Shoolini's unique potential to provide English training to East Asians could also be harnessed.

Student Catchment Area

The state of Himachal Pradesh has remained on the sidelines of the progress India has experienced in the last two decades. In addition, people of the region prefer to remain aloof from the hum-drum of city life and consequently, with inadequate exposure to modernity find it difficult to blend with the mainstream. This creates youth who lack exposure and confidence and this remains a barrier in his/her educational progression as a professional. Though Shoolini University has taken it on itself to bring the region's unexposed youth to the mainstream and inculcate global competencies, the base material remains a source of weakness.

While the SPRINT program was especially developed keeping this in mind, in my opinion there is a requirement to provide greater exposure to our students. Beyond making him/her industry ready, global exposure is also required. In view of this, Shoolini's exchange programs need to be further strengthened.

Flexibility in Governance – A Procedural Weakness

While speed of decision making is a major advantage Private Universities including Shoolini University enjoy over their Public counterparts, this also translates as a weakness, as procedures and processes suffer especially in the institutions with high growth phases.

Since the development of Shoolini University was undertaken at a very brisk pace, systems and procedures have required time for consolidation for the structured growth of the institution. I see the run-up for audit by NAAC and experience of ISO certification as an opportunity to plug any procedural loopholes.

OPPORTUNITIES

Ready Platform to Dominate the Field of Private Education in the Region

Even a casual analysis of the performance of Private Universities in India over the past decade would distinguish performers from non-performers. Unfortunately, majority of the Private Universities/Institutions that have mushroomed have been for commercial reasons – quality of education being accorded low priority. Now that the general public can distinguish the grain from the chaff, Shoolini University which has earned a name for itself has the unique opportunity to make a mark. In view of these opportunities, the institutional strategy needs to showcase even more achievements – both with the government and public at large, as also to make inroads overseas.

Re-energize Research Focus on Himalayas

Himalayas are the richest repository of herbal wealth – a resource for discovering biomolecules for the drug industry. In addition, the microflora living in extreme conditions offer unique genetic material for gene transfer under drought and cold conditions.

The uniqueness of the Himalayas biodiversity offers thousands of unanswered research issues which can make India a front runner in the drug industry. The need is to undertake research work through coordinated efforts by Himalayan Universities. Shoolini University with a dozen patents in the field of life sciences can play the leading role among the Consortium of Himalayan Universities.

In addition, bio-remediation, climatic change and conservation of water resources along with rehabilitation of bio-ecological and geological ecosystems need to be taken for societal benefits. Shoolini University needs to play the lead role in formulating joint projects for international funding on the aforesaid themes.

While a start has been made, we need to further energize research efforts on the myriad issues that afflict the Himalayas. In order to be acknowledged as a premier institute in this field, we need to undertake outcome driven research. At the same time, the approach should be multi-disciplinary with multiple objectives and outcomes. Apart from opportunities within the institution, collaborative projects need to be formalized within the consortium of Himalayan Universities, Governmental Bodies and NGO's. In addition, this opens up another area for collaboration with China through the MoU with Lanzou University.

Improve Quality of Teaching Faculty

Quality education comes with quality faculty and this is duly supported by the right infrastructure and environment. The successful model of the Multi-layered Research Faculty of the University could be replicated (details under best practice in Criterion Seven of the SSR), for bringing up the quality of the academic faculty. In addition, further enhancing the University's faculty development and mentorship programs will also be critical. This would be in consonance with the academic mission of Shoolini University, and at the same time, enhancing the reputation of the institution.

Create a Center of Excellence for Informatics

In view of its growing importance and expanding domains in the fields of ICT and the Cyber world, coupled with the technical acumen and proven prowess of the University, there is a great opportunity to expand different fields in academics and to undertake research. In view of the fact that HP intends to be an IT hub, there is ample opportunity for expanding the scope of ICT and taking it to the next level – the role of a Center of Excellence being pivotal for this initiative.

To make Shoolini synonymous with Solan Township

In the past, Solan was known for its Brewery which changed to being a Mushroom Research Centre of the Country. In view of Shoolini University's research prowess, another dimension can be added by undertaking plant-drug research. The twin opportunities offered by location in the Himalayas and being co-located with the Pharmacological industrial belt, makes Shoolini University an ideal destination for undertaking pharmaceutical research. The University has the unique opportunity to play the lead role in uplifting the economy of the herbal corridor.

In addition, the land scape of the University and the Yogananda Library have the potential to become the tourist land marks. Its initiative to set up Yogananda Ville in the lap of the pine forests for research and academic pursuits will enhance its reach, both in India and abroad for meditation. The proposed village will have

facilities and caves for meditation and offer residential facilities for all those who intend to spend their sabbatical on meditation and spirituality.

CHALLENGES

Leveraging Disruptive Innovation

The University has chosen a highly ambitious goal for itself, and in order to attain it, it has to seek 'out of box' solutions. Leveraging technology, concentrating on niche areas for research and at the same time building collaborations and linkages appear to be the way forward. In order to do so, time bound action plans need to be pursued by the University.

Broad basing Funding and Governmental Support

Currently, funding for the University is either sourced from within or from project based extramural funding. In order to take research to the next level, it becomes incumbent to spread the net internationally as also to enhance the scope of consultancy and projects from the industry.

Enhance Reach – through Technology and Linkages

Despite institutional collaborations, the reach of the University is required to be enlarged if the University aspires to play a lead role globally. This requires adopting a multi-pronged strategy. On one hand, there is a requirement to extend on-line learning beyond the campus. At the same time, there is a requirement to be pro-active in sourcing global research sites and making them available in an easily accessible packages to students is a technological challenge. Correspondingly the University has to extend its physical reach through collaborations, consultancies and linkages.

Improve Quality of Academic Faculty

In order to attract foreign students and even Indian students aspiring to work abroad, it is necessary to bring programs taught at the University to global standards and getting them accredited for equivalence. This is especially applicable for programs of the Engineering streams and Management. NBA certification being the aim to be counted in the Washington Accord, therefore needs to be the immediate aim and due priority needs to be accorded to this.

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EXECUTIVE SUMMARY

The Executive Summary as given in succeeding pages encapsulates the essence of the SSR of Shoolini University, as defined in the seven criterion.

CRITERION I: CURRICULAR ASPECTS

The design of curriculum involves active participation of major stakeholders and follows a systematic but dynamic process and aims to enrich learning. Steps involved in the design, development, implementation and revision of curricula are 'need based' and undertaken after due analysis and debate. At the same time, they incorporate best practices followed. Requirements are assessed in consultation with leading academicians, industry experts, potential employers, students and teachers.

Shoolini University follows the principle of promoting an outcome driven curriculum, which is aligned with the institutional vision of producing students with global competencies. Due importance is assigned to providing a range of choices to the students within a flexible environment; to this effect, the University has implemented the choice based credit system across the board from the current academic year (2015-16).

The University prides itself in promoting socially relevant research which is buttressed by industry interface. Within this, it focuses on the myriad issues that impact the eco-sustainability of the Himalayan Region and this gets reflected in the design and implementation of courses. Since the University has the distinction of being nominated as a nodal research agency by DRDO, new courses and areas of research have also evolved in the niche field of Nanotechnology. A similar industry 'need driven' course was developed as part of the MBA curriculum in active collaboration with GENPACT, a leading multinational corporation.

The success story of the Skills Progression through Innovative Training (SPRINT) program, which is a inclusive 'requirement' based program of imparting 'Soft' and 'Technical' Skill(s), is a feather in the University's cap. The pioneering program adopts a multi-pronged approach of adding, supplementing, updating, and reinforcing formal learning that students have acquired in their regular courses.

CRITERION II: TEACHING-LEARNING AND EVALUATION

The admission process is transparent and conducted as per the guidelines of regulatory bodies such as the Himachal Pradesh Private Education Regulatory Commission, PCI, UGC, and AICTE. Merit, inclusiveness and fairness govern the process. The University does not have any non-transparent admissions and does not endorse any 'Management' quota, or the like.

Providing students with a conducive and open learning environment is our constant endevour. Regular monitoring is in place to ensure that each and every student attains his/ her full potential as a citizen on the world. The teaching faculty is well qualified and follows modern pedagogy; shortcomings, if any, are addressed through various Faculty Development initiatives.

To supplement and/or augment learning and research, the library not only is well stocked but leverages technology to collate and disseminate knowledge. Classrooms are ICT enabled and there is a University-wide, state of the art, Learning Management System in place through the eUniv platform to ensure that learning becomes a continuous process and not limited to the class room locales or timing.

There is a special focus towards enabling students from the region pursue quality higher education. For the socially disadvantaged section, the University has opened its doors through various scholarships. Students are helped to adjust to the University through well-structured induction programmes, and the process continues throughout their stay through a robust mentor-mentee initiative.

The teaching-learning process is well-structured and student progression is monitored. Detailed course content, lecture schedules, learning objectives, reading lists, assessment criteria, etc. are communicated to the students before the commencement of every course and there is an evaluation process in place. Importance is accorded to 'hands-on' learning through project work by students.

In our effort to promote learning from leaders across various fields and walks of society, the University has initiated the Guru series of talks. Every fortnight, the University proudly hosts an eminent person, so that the University fraternity gets first hand exposure to their wealth of wisdom and knowledge. In addition, the University has a plethora of outreach programs that include seminars, guest lectures, workshops, panel discussions, alumni talk, etc. which aims to provide a wholesome learning environment to the students.

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

By following a 'Research Driven' model. Shoolini University has emerged as a leading center of quality research in a short span of time as it has created specialized labs and quality infrastructure. Various national research funding agencies like DST, DBT, ICMR, DRDO, etc. have taken cognizance of the University's research potential and have extended funding in excess of Rs.150,000,000/- in the last three years alone(received or approved). This is substantiated by a growing list of patents and SCOPUS listed Research Papers, and the University is privileged to have the highest 'h' index as compared to its contemporaries in North India. In addition to

research, consultancy is an area in which the University is progressively expanding its reach and value.

Consultancy projects in pharmaceutical, management, engineering and allied industries are at hand. To illustrate, the University has been entrusted by the World Gold Council to undertake a study on the role of gold in the economic sustainability of the Himalayan Region focusing on Himachal Pradesh.

Shoolini University's research agenda is focused on harnessing, conserving and managing the Himalayan biodiversity. The University aspires to place itself as the resource pool in all fields pertaining to sustainable Himalayan development. It is with this mission that the University is a proud member of the Consortium on Himalayan Universities.

The process is on for establishing research centres with national as well as international reach. Various research collaborations are also being undertaken with different institutes, universities and industries nationally as well as internationally. Though the student/faculty exchange program is still in its nascent stage, the University is striding to develop its alliances and linkages towards meeting its goal of promoting global competencies.

Collaborative and inter-disciplinary research, aligned with the University's research agenda, is promoted through the Joint Research and Development Advisory Committee (JRDAC). The JRDAC provides recommendations to members of the faculty for setting up research agendas and goals, and also to monitor their progress. Synergising of individual efforts, fostering multi-disciple research and their alignment with the overarching agenda of the University therefore, is the key responsibility of the JRDAC.

Apart from members of the faculty, the research agenda of the University is also being carried forward by a team of dedicated research scholars and post-graduate students. During the last four years the University has proudly conferred Ph.D's to over forty students and there are an additional two hundred plus students who are at various stages of progress in pursuit of their degrees. In order to maintain global standards, the University has mandated that each Ph.D. thesis is evaluated by an international guide, preferably from the USA, Europe or any of the technological advanced countries. In addition, doctoral students are mandated to publish at least two articles in peer reviewed journals as part of their degree requirement. In order to benchmark its research to international standards, the University has taken a step further and has mandated that all the research publications should be in journals which are indexed in the SCOPUS database.

The University is cognizant towards its social obligations and pro-actively engages with the local community. Various activities are undertaken on a regular basis.

Blood donation camps, tree plantation, practical training to local villagers in food processing and providing guidance to farmers on new technologies and quality seeds as a recurring event. Adoption of a village with targeted social programs, etc. are some of the other community interface campaigns undertaken by the University. Another example is the recent launch of our 'save the Himalayas' campaign, under which, Shoolini University plans to plant over one lac trees every year.

The University takes great pride in spurring scientific creativity and innovation in school children. The University is pro-active in extending the Department of Science and Development INSPIRE program, for which it has been nominated the Nodal institution. Till date, the University has enthused over 5000 budding scientists from the various schools of Himachal Pradesh.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

In spite of being young in age, Shoolini University has state-of-the-art infrastructure that compares favourably with some of the best institutions in India. The University's commitment towards quality education can be partly visualised if one visits any of the 105 laboratories that exist with the purpose of promoting learning through teaching, research, workshops, computing, or studio work. The University prides itself in its achievements thus far, and endeavours to march in its pursuit of providing world class learning environment and producing the leaders of the future.

Conventional teaching has been supplemented and augmented by the use to latest technology. ICT enabled class rooms facilitate teachers to demonstrate problem solving techniques. The library is well stocked with approx. 1.7 lac book titles in the physical and electronic form. The University subscribes to around 9,000 e-journals through USA based EBSCO and DELNET databases. These resources allow the students and researchers to quality research resources, in their respective areas of research. The multi-functional Enterprise Resource Planning (ERP) system coupled with the enhanced Learning Management System (LMS) and planned Knowledge Management System (KMS) (developed in-house adapting freeware) has/ would provide an interface to teachers and the students to take the teaching-learning processes to a new level.

The entire University is connected through a high bandwidth enabled wireless network and auditoriums are linked through intranet as well as internet with video-conferencing facilities. Such a technology savvy learning environment allows students to extend and explore their research interests on a 24x7 basis. The iconic Yogananda library building has been transformed into a multi-dimensional facility and it stands out, not only as an architectural splendour but also as the pulsating heart of the University, extending knowledge on a click.

At Shoolini University, learning is not limited to class rooms and laboratories. The latest addition is the Dr. APJ Abdul Kalaam Seminar Complex, which has two state-of-art auditoriums and three seminar rooms, with a total capacity over 500. In addition, there is a Cineplex with a seating capacity of 200 that offers a high quality audio and visual experience to its audience. The University offers its students excellent indoor and outdoor facilities to pursue a sport of their inclination and choice. The open air theatre, auditoriums, cafeterias, open spaces nestled within the forests and the hills offer students a sylvan experience of University life that is a hallmark of the University.

CRITERION V: STUDENT SUPPORT AND PROGRESSION

Holding on to high standards are not possible without quality students. This makes it important to ensure that all the students reach and perform at their true potential. The University recognizes that growth of a student cannot be limited to the sphere of academics alone and in order to evolve into a complete human being, students need to go through a multi-faceted development process. As such, the University supports students in all their pursuits. Guidance and monitoring of the students' progress is performed regularly through a well-defined mentor-mentee program.

The academic support structure at Shoolini University begins as soon as students are admitted and continues throughout their stay at the University and even beyond. The entry level support system involves a team of trained counsellors and members of the faculty who help the students get acquainted with the academic structure and expectations. The support system at the post admission phase is monitored by respective program coordinators and deans; other faculty members contributing in the process. There is a placement team headed by Director Placements that provide exit level support. Post exit, the Alumni Coordinator keeps a track of the professional progression of Shoolini's students.

The offices of the Dean Student Welfare and the Dean Resident Students provide students with all forms of infrastructural support they require for their non-academic pursuits. Adequate opportunities are provided to the students to hone soft skills and develop different facets of their personality. Regular sessions are conducted by experts to help students practice Yoga and meditation. Physical Training and Meditation being mandatory for first year UG students of the Engineering streams.

CRITERION VI: GOVERNANCE, LEADERSHIP & MANAGEMENT

Shoolini University was set up by a reputed and well-regarded academician-researcher, whose passion for education and zeal to promote Higher Learning in India to Global standards is reflected in the institutional vision. The other promoters of the University are also leaders in their respective fields. The sponsors have strict

principles when it comes to ensuring that the University is a true 'not for profit' institution. The sponsors of the University are also keen on contributing to the sustainability of the Himalayan region. Upliftment of the rural youth of the region and their seamless merger with the national mainstream is accorded utmost priority by the University management.

Shoolini University has evolved with research being the driving engine. The focus of the research, however, is biased on issues that pertain to the Himalayan region. The University's distinctiveness arises out of this unyielding passion, shared by all its constituents, to address the needs of the mountain region and its people.

Shoolini University prides itself on its democratic, consensus-based and inclusive decision-making processes, which involve the participation of all the stakeholders; it is not a 'one-way' 'top-down' decision making process. On the contrary, the focus is on consensus building at various levels which allows members to partake, and in a way, this ensures their willing participation in its growth and progression.

CRITERION VII: INNOVATIONS AND BEST PRACTICES

In spite of being six years old, Shoolini University is being increasingly recognized as a center of innovation in higher learning by national and international bodies. C-fore's nationwide survey on educational institutions that was reported in the May 2015 issue of Education Watch magazine has put Shoolini University's rank at 124 out of all Indian institutions. The University does much better in terms of research reputation and is the 54th Most Admired Research University in India

In its quest to be a global front-runner, technology is being leveraged in a big way to connect and bring knowledge resources available across the world to facilitate learning and research at Shoolini. The eUniv platform powered by the LMS, with ambitious plans to develop a versatile KMS 'in-house' are manifestations of the technological endeavours of the University.

The first of the best practices in the University is the 'four tiered' faculty recruitment and retention policy. Distinguished scientists and accomplished academicians train and pass on their knowledge to budding scientists and new Ph.Ds. There is an apprenticeship model of training that allows the young scientists observe and learn from the leaders of their fields.

The second 'best practice' is the accelerated learning of students at various stages in their academic progression, conducted through the SPRINT program, which has now been adopted across the campus due to its spectacular success. This is yet another example of innovation and best practice implemented in the University. The value addition to students because of this novel initiative has been tremendous and the feedback from students who have entered the corporative world/ industry has been gratifying.

Profile of the University

1. Name and Address of the University:

Name:	Shoolini University of Biotechnology and Management Sciences
Address:	Village Bajhol, P.O. Sultanpur
City: Solan	Pin: 173229 **State:** Himachal Pradesh
Website:	www.shooliniuniversity.com

2. For communication:

Designation	Name	Telephone with STD Code (01792)	Mobile (+91)	Fax (01792)	Email
Vice Chancellor	Prof. P.K. Khosla	O: 308000 R: 221340	98160-64182	308000	vc@shooliniuniversity.com
Pro Vice Chancellor	Prof. Atul Khosla	O: 308000 R: 221340	98180-47400	308000	atulkhosla@ shooliniuniversity.com
Registrar	Prof. Sunil Puri	O: 308000 R: 654020	98160-11680	308000	registrar@ shooliniuniversity.com
Steering Committee/ IQAC Coordinator	Prof. Sunil Puri	O:308000 R: 654020	98160-11680	308000	deanacademics@ shooliniuniversity.com

3. Status of the University:

State University	
State Private University	✓
Central University	
University under Section 3 of UGC (Deemed University)	
Institution of National Importance	
Any other	

4. Type of University:

Unitary   ✓

Affiliating

5. Source of funding:

Central Government	
State Government	
Self-financing	✓
Any other	

6. a. **Date of establishment of the University: <u>16/10/2009</u>**

b. **Prior to the establishment of the University, was it a/an**

PG Center   Yes ☐   No ✓

Affiliated College   Yes ☐   No ✓

Constituent College   Yes ☐   No ✓

Autonomous College   Yes ☐   No ✓

7. Date of recognition as a University by UGC or any other national agency:

Under Section	dd	mm	yyyy	Remarks
i. 2f of UGC*	07	02	2011	UGC Letter F.No. 8-1/2010 (CPP-I/PU)
ii. 12B of UGC*	-	-	-	-
iii. 3 of UGC#	-	-	-	-
iv. Any Other^(specify)	16	06	2015	ISO 9001:2008

*UGC Letter is enclosed as Annexure – I
* ISO certificate is enclosed as Annexure – II

8. Has the University been recognized

(a) By UGC as a University with Potential for Excellence?
Yes ☐   No ✓

(b) For its performance by any other governmental agency?

Yes ☑   No ☐

(i)	DSIR	-	F.No.11/446/2005-TU-V	29/04/2014
(ii)	AICTE	-	F.No.08/04/HP/PHAR/2008/01	02/06/2009
(iii)	PCI	-	Ref.No.32-917/2010-PC/86-88	05/04/2011

* DSIR certificate is enclosed as Annexure - III
* AICTE approval is enclosed as Annexure - IV
* PCI approval is enclosed as Annexure - V

9. Does the University have off-campus centers?

Yes ☐   No ☑

10. Does the University have off-shore campuses?

Yes ☐   No ☑

11. Location of the campus and area:

	Location*	**Campus area in acres**	**Built up area in sq. mts**
Main campus area	Rural	20.1	52, 045
Other campuses in the country	-	-	-
Campuses abroad	-	-	-

12. Provide information on the following: In case of multi-campus University, please provide campus-wise information.

- **Auditorium/seminar complex with infrastructural facilities:**

  Rattan Tata Hall (250 seats),Peter Drucker (260 seats), Cineplex (150 seats), Dr. APJ Abdul Kalam Seminar Complex (Two auditoriums and three seminar rooms – total capacity 500 Seats), Multi-Purpose Complex – Indoor stadium (1200 capacity), Open Air Theater (500 capacity)

- **Sports facilities**
  Play grounds   : Basketball, Volley Ball, Badminton, Cricket practice pitch
  Swimming pool : Nil
  Gymnasium   : Central gymnasium in the indoor Stadium; additional facility in boys and girls hostel

Any other **:** Adventure Camp

- **Hostels**
  Boy's hostel
i.	Number of hostels	-	04
ii.	Number of inmates	-	587
iii.	Facilities	-	Wi-Fi, Mess, Dining Hall, Common Room, Shopping Center, Cafeteria

  Girl's hostel
i.	Number of hostels	-	04
ii.	Number of inmates	-	574
iii.	Facilities	-	Wi-Fi, Mess, Dining Hall, Common Room, Café, Cineplex, Mini Library

  Working women's hostel
  Number of hostel. Presently none, though one (Meera Hostel) is planned to be converted to Working Women's Hostel once construction of new girls hostel completed.
i.	Number of inmates	- Nil
ii.	Facilities	- NA

- **Residential facilities for faculty and non-teaching:** Four flats and four Staff Quarters. More planned to be added progressively.

- **Cafeteria** **:** Five

- **Health center** - A four bed hospital on campus.
  - Two doctors, (one lady)
  - Three nurses, two available at night
  - One equipped ambulance; one additional Vehicle kept for 24×7 as stand by
  - Limited testing facilities

- **Facilities like banking, post office, book shops, etc.**
  Yes, Shopping Center, ATM facility exists.

- **Transport facilities to cater to the needs of the students and staff.**
  University runs own buses from Solan and nearby places.

- **Facilities for persons with disabilities** - Being progressively built up. The Knowledge center had been enabled for persons with disabilities.

- **Animal house** - Yes, Approved by Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA)

- **Incinerator for laboratories** - Disposal outsourced.

- **Power house** - Electrical sub-station of 440kV applied for. Five generators with total wattage of 375 KWA exists. Solar water heating in all hostels and steam cooking by solar induction (Girls hostel).

- **Waste management facility** – Garbage disposal outsourced, vermi-composting facilities, Sewage Treatment Plant.

13. **Number of institutions affiliated to the University** - Not Applicable

14. **Does the University Act provide for conferment of autonomy (as recognized by the UGC) to its affiliated institutions? If yes, give the number of autonomous colleges under the jurisdiction of the University**

    Yes ☐   No ☑   Number ☐

15. **Furnish the following information:**

Particulars	Number	Number of Students
a. University Departments/ Schools		
Undergraduate and Post graduate	09	1896 (UG) + 722 (PG)
Research centers on the campus	05	22 (not to be counted)
b. . . . k. Not applicable	-	-

16. **Does the University conform to the specification of Degrees as enlisted by the UGC?**

    Yes ☑   No ☐

17. Academic programs offered by the University departments at present, under the following categories:

Programs	Number	Programs	Number
UG	19	M.Phil.	07
PG	21	Ph.D.	15
Integrated Masters	10		
Total 72			

*List of programs offered is enclosed as Annexure VI

18. Number of working days during the last academic year. 229

19. Number of teaching days during the past four academic years.

180	183	181	182
2011-12	**2012-13**	**2013-14**	**2014-15**

20. Does the University have a department of Teacher Education?

Yes ☐   No ☑

21. Does the University have a teaching department of Physical Education?

Yes ☐   No ☑

22. In the case of Private and Deemed Universities, please indicate whether professional programs are being offered?

Yes ☑   No ☐

*The approval of B. Pharmacy for AICTE and PCI is enclosed as Annexure IV and V.

23. Has the University been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.

The UGC inspection report for 2f and the action taken there upon is available on the UGC website.

24. Number of positions in the University

Positions	Teaching faculty			Non-teaching staff	Technical staff
	Professor	**Associate Professor**	**Assistant Professor**		
Sanctioned by the UGC/ University/ State Government					
Recruited	18	31	125	139	38
Yet to recruit	06	12	24	-	04
Number of persons working on contract basis	-	-	-	-	-

25. Qualifications of the teaching staff

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	
Permanent teachers							
D.Sc./D.Litt./ Post Doc.	08	01	04	01	06	01	21
Ph.D.	07	-	12	02	19	05	45
M.Phil.	-	-	-	-	03	05	08
PG	02	-	11	01	56	30	100
Temporary teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-
Part-time teachers							
Ph.D.	10	01	-	-	-	-	11
M.Phil.	14	-	-	-	-	-	14
PG	07	-	-	-	-	03	10

26. Emeritus, Adjunct and Visiting Professors.

	Emeritus	Eminence	Adjunct	Visiting
Number	-	14	07	12

27. Chairs instituted by the University:

	Chairs
School/Department	Nil

28. Students enrolled in the University departments during the current academic year, with the following details:

Students	UG	PG	Integrated Masters	M.Phil.	Ph.D.
From the state where the University is located	M*-277 F*-177	M-104 F-104	M-08 F-08	M-02 F-08	M-18 F-12
From other states of India	M-51 F-30	M-20 F-18	M-04 F-02	M-0 F-01	M-01 F-01
NRI students	-	-	-	-	-
Foreign students	M-03 F-0	-	-	-	-
Total	M-331 F-207	M-124 F-122	M-12 F-10	M-02 F-09	M-19 F-13
M*-Male F*-Female					

29. 'Unit cost' of education
(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)
(a) including the salary component = Rs. 105446/-

(b) excluding the salary component = Rs. 50284/-

30. Academic Staff College   Not Applicable

31. Does the University offer Distance Education Programs (DEP)?

Yes ☐   No ☑

32. Does the University have a provision for external registration of students?

Yes ☐   No ☑

33. Is the University applying for Accreditation or Re-Assessment? If Accreditation, name the cycle.

Accreditation: Cycle 1 ☑   Cycle 2 ☐   Cycle 3 ☐   Cycle 4 ☐

Re-Assessment: ☐

34. Date of accreditation *(applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)   Not Applicable

35. Does the University provide the list of accredited institutions under its jurisdiction on its website? Provide details of the number of accredited affiliated / constituent / autonomous colleges under the University.
Not Applicable

36. Date of establishment of Internal Quality Assurance Cell (IQAC) and dates of submission of Annual Quality Assurance Reports (AQAR).
IQAC   **26/12/2014**
AQAR   Not Applicable

37. Any other relevant data, the University would like to include (not exceeding one page).

(*Intentionally left blank*)

Criteria Wise Inputs

CRITERION I: CURRICULAR ASPECTS

Ever since its inception, Shoolini University has strived to maintain excellence in teaching, research, innovations, promotion of use of technology and community services. There has been a constant endeavor in designing and developing outcome based, industry oriented, research focused, nationally and internationally relevant curriculum that inculcates high ethical values and global competencies among students.

The University provides a broad spectrum of courses ranging from basic, applied, technological, managerial, to interdisciplinary and specially designed courses that hone functional, computational and soft skills of the students.

1.1 Curriculum Design and Development

An outcome driven curriculum aligned with the vision of the University is designed on the basis of the inputs from industry, alumni, academia, students and competitive benchmarking to make it globally relevant.

1.1.1. How is the Institutional Vision and Mission reflected in the academic programs of the University?

The vision and mission of the University, to be a globally ranked University, has been interwoven by integrating teaching, research and extension in its academic programs. The key thrusts of our academic programs and curriculum include:

- o Programs in emerging areas eg. Nanotechnology, food technology
- o Flexible and choice based curriculum
- o Outcome based curriculum that is benchmarked with global institutions
- o Industry and employment focussed courses and curriculum
- o Upgradation of soft skills of students especially from rural and semi urban areas

1.1.2. Does the University follow a systematic process in the design and development of the curriculum? If yes, give details of the process (need assessment, feedback, etc.).

Yes. A systematic process based on program outcomes, industry orientation and progressive vision is followed for the design and development of curriculum. This process including all academic processes of the university are ISO 9001:2008 certified. The process factors into all relevant courses

each with course description, content, skill outcomes, learning outcomes, lecture-wise schedule, pedagogy and evaluation methodology etc. Need assessment is done through consultations with experts, industry, potential employers and through feedback from teachers and, most importantly, students. Students' views are taken in regular teacher-student meetings under mentor-mentee relationship.

The current curriculum design involves a two-step process:

Step-1: The draft curricula of the different Schools prepared by respective committees incorporates the views and suggestions of industry, alumni, prominent external academicians, and potential employers. This is then competitively benchmarked nationally and globally.

Step-2: The modified curriculum is then presented before the Board of Studies (BoS), constituted for each of the Schools. The BoS is headed by the respective Dean and comprises of faculty, industry experts and noted academics as members. The concerned BoS then recommends for approval, to the Academic Council, the detailed curriculum - syllabi with skill and learning outcomes, pedagogy, scheme of examination, lecture schedules and evaluation mechanism.

The process flow chart is given in figure 1.1 in the following page.

1.1.3 **How are the following aspects ensured through curriculum design and development?**

Employability:

Outcome driven **c**urriculum is designed and developed with the participation of industry experts. Alignment with industry requirements has been a guiding approach while designing the curriculum, particularly for professional programs like B. Tech., B. Pharmacy and MBA. Centers of Excellence have been established with industry partners like GENPACT, Anand Automotive, Damco Solutions, Tirupati and Meridian for equipping students with industry focused practical education. A specially developed program 'Skills Progression through Rapid Intensive and iNnovative Training' (SPRINT) (for details see criterion 7.3) has also been incorporated as an integral component of the curriculum.

With the incorporation of certifications such as the Association of Mutual Funds in India (AMFI) certification, TALLY, MS EXCEL and Aptitude Training employability of students has made quantum jumps as witnessed during the placements made in the academic year 2014-2015.

Figure 1.1 Curriculum Design and Development Process
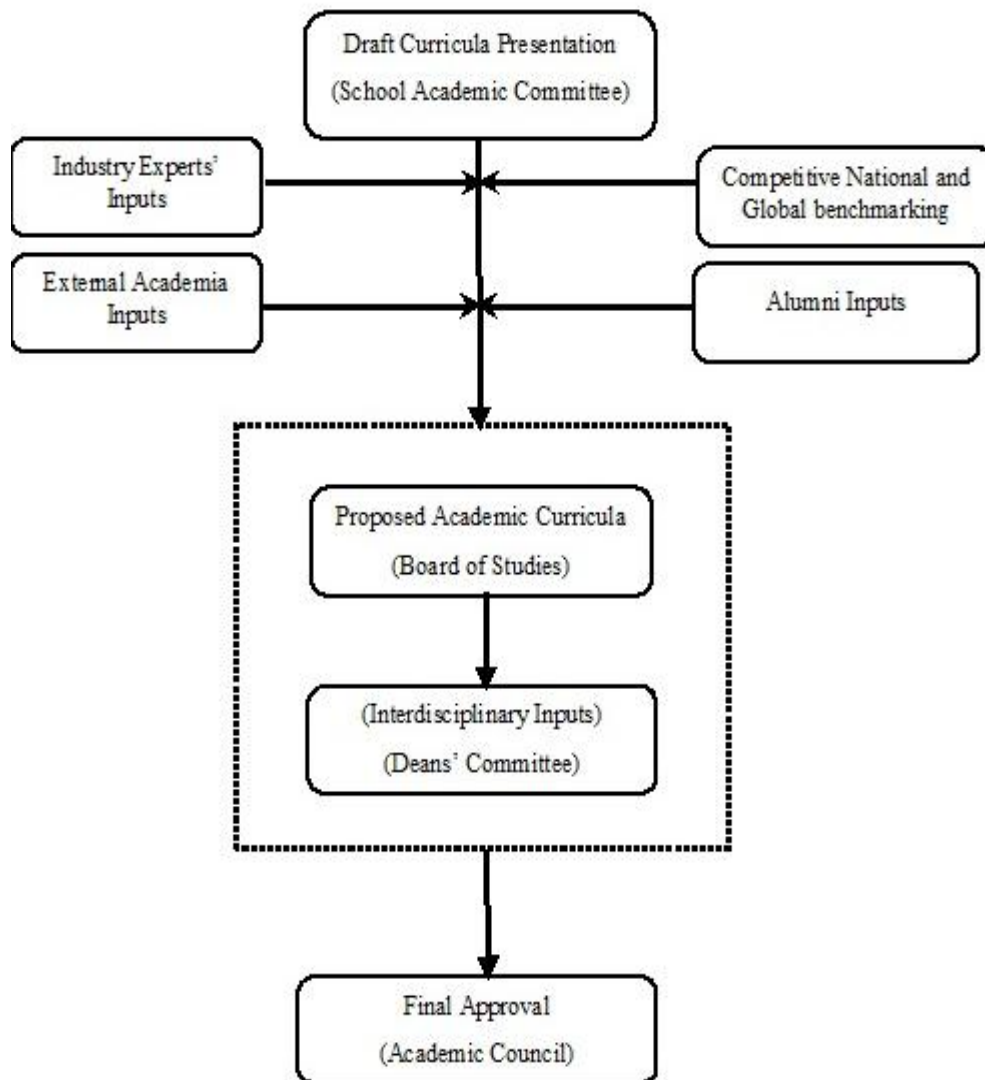
Innovation:

Curriculum innovations include:

- o Joint development of curriculum with industry
- o Development of detailed Lecture Schedules; comprising clearly defined learning objectives, functional outcomes and skill outcomes and mention of reference study materials.

- o Distribution of the lecture schedules before commencement of classes and availability of the same on eUniv, a University-wide student portal of Shoolini University.
- o Case study method introduced and is a regular feature of the teaching methods.
- o Online Study Material- Lectures, cases, assignments and audio/videos etc.
- o Live Industry Projects.
- o Guest/Expert Lectures.
- o Guru Series Talks – Under this initiative, eminent personalities from all walks of life deliver talks on issues enriching the core curriculum; a way forward to imbue real life skills.

Research:

The course curriculum is designed to spur innovation and inculcate interest in research by introducing research training both at the undergraduate and postgraduate levels across all faculties. The students get exposure to research methodology, research ethics, literature search, presentation skills as well as training in basic and contemporary technologies.

Some students of the University carry out funded research as JRF/SRF and also as research scholar with faculty members doing industrial projects. Some of the students are also the co-authors of research publications. Majority of faculty is Ph.D. and/or Post Docs from national and international institutes of very high repute like NIH USA, Notre Dame USA, IISc, IITs and IIMs etc.

The research policy of University emphasizes on the utilization and conservation of Himalayan economy and the faculty and students are encouraged to address the topical issues of the region. The University has also signed industrial and academic MoUs with institutions in India and abroad (refer to 3.7.3 for details). Research leading to patents is encouraged even for students.

In order to promote quality research, the university encourages its doctoral students to publish two research papers in Scopus indexed journals before the submission of their theses. Also, one of the thesis examiner has to be a professor in a foreign university.

1.1.4 To what extent does the University use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the University been instrumental in leading any curricular reform which has created a national impact?

All norms followed by the University are as per the guidelines of regulatory bodies (UGC, AICTE, PCI, etc.) for all academic programs. The University has decided to adopt 'Choice Based Credit System (CBCS) from the session 2015-16 onwards.

University has undertaken several innovative initiatives that we believe will have impact in the coming years.

- o Shoolini's online learning initiative (eUniv) has innovated continuous learning delivery

- o For functional and soft skills, the SPRINT program has been started as a credit course for MBA students and is being rolled out to other Schools. SPRINT has the potential to be a role model for functional and soft skills training.

- o University admits annually 20-30 employees of Anand Automotive Pvt. Ltd. in B. Tech. (Automobile Engineering) under lateral entry as per the curriculum designed by the company. Such joint industry programs are role models for Academia-Industry alliances

- o A multinational company, GENPACT, jointly developed with Shoolini University a course for MBA (Business Process Management) for national requirement.

- o Physical Training and Meditation forms one credit hour course in B.Tech. From 2015-16 it would be an elective course under CBCS for enhancement of ethical values and physical and mental fitness of the students.

1.1.5 Does the University interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the University benefitted through interactions with the stakeholders?

As mentioned earlier, the University takes feedback and suggestions for the curriculum development and revision process by incorporating inputs from the potential employers, scientists, alumni and other eminent personalities who visit the campus during placement week, workshops, conferences, SPRINT program and Guru Series talks. Boards of Studies constituted at School level include external experts from industry and academics to

structure and revise the curriculum for improving the employability of students.

Through such interactions, the University has developed best practice curriculum. Placements of the University's students have significantly improved through regular fine-tuning of curriculum.

1.1.6 Give details of how the University facilitates the introduction of new programs of studies in its affiliated colleges.   Not Applicable

1.1.7 Does the University encourage its colleges to provide additional skill-oriented programs relevant to regional needs? Cite instances (not applicable for unitary universities).   Not Applicable

1.2 Academic Flexibility

1.2.1 Furnish the inventory for the following:

Programs taught on campus:

(1) Faculty of Applied Sciences and Biotechnology
(i) School of Biotechnology

Table 1.1 Programs taught in the School of Biotechnology

UG Programs	PG Programs	Ph.D. Program
B. Sc.(Hons) Biotechnology B. Sc.(Hons) Microbiology	M. Sc. Biotechnology M. Sc. Microbiology M. Sc. Biochemistry M. Tech. Biotechnology M.Phil. Biotechnology M. Phil. Microbiology	Ph.D. Biotechnology Ph.D. Microbiology
	Dual Degree	B.Tech.-M.Tech. Biotechnology B.Tech.-MBA Biotechnology

(ii) School of Bioengineering and Food Technology

Table 1.2 Programs taught in the School of Bioengineering and Food Technology

UG Programs	PG Programs	Ph.D. Program
B. Tech. Biotechnology B.Tech. Food Technology	M. Tech. Food Technology M. Sc. Food Technology	Ph.D. Food Technology
	Dual Degree	B.Tech.- M.Tech. Food Technology

(2) Faculty of Management Sciences and Liberal Arts
 (i) School of Business Management and Liberal Arts

Table 1.3 Programs taught in the School of Business Management and Liberal Arts

UG Programs	PG Programs	Ph.D. Program
BBA B. Com (Hons.) B. A. (Hons.) Economics	MBA	Ph.D. Management Science Ph.D. Economics

(3) Faculty of Engineering and Technology
(i) School of Mechanical and Civil Engineering

Table 1.4 Programs taught in the School of Mechanical and Civil Engineering

UG Programs	PG Programs	Ph.D. Program
B. Tech. Mechanical Engineering B. Tech. Civil Engineering B.Tech. Nanotechnology	M. Tech. Mechanical Engineering M. Tech. Civil Engineering	Ph.D. Mechanical Engineering Ph.D. Civil Engineering
Dual Degree	B.Tech. – M.Tech. Mechanical	

(ii) School of Electrical and Computer Science Engineering

Table 1.5 Programs taught in the School of Electrical and Computer Science Engineering

UG Programs	PG Programs	Ph.D. Program
B. Tech. Electrical Engineering B. Tech. Computer Science Engineering B. Tech. Electronics & Communication Engineering B. Tech. Bioinformatics	M. Tech. Computer Science Engineering M. Tech. Electronics & Communication Engineering	Ph.D. Computer Science Engineering Ph.D. Electronics & Communication Engineering
Dual Degree	B.Tech. – MBA B.Tech. – M.Tech. (ECE) B.Tech. – M.Tech. (CSE)	

(4) Faculty of Pharmaceutical Sciences
(i) School of Pharmaceutical Sciences

Table 1.6 Programs taught in the School of Pharmaceutical Sciences

UG Programs	PG Programs	Ph.D. Program
B. Pharmacy	M. Pharmacy (Pharmaceutics) M. Pharmacy (Pharmacology) M. Pharmacy (Pharmaceutical Chemistry) M. Pharmacy (Drug Regulatory Affairs)	Ph.D. Pharmaceutical Sciences

(5) Faculty of Basic Sciences
(i) School of Biological and Environmental Sciences

Table 1.7 Programs taught in the School of Biological and Environmental Sciences

UG Programs	PG Programs	Ph.D. Program
B. Sc.(Hons) Zoology B. Sc.(Hons) Botany	M. Sc. Zoology M. Sc. Botany M.Sc. Environment Science M. Phil. Zoology M. Phil. Botany M. Phil. Environment Science	Ph.D. Zoology Ph.D. Botany Ph.D. Environment Science
	Dual Degree	B.Sc. (Hons) – M.Sc.

(ii) School of Chemistry

Table 1.8 Programs taught in the School of Chemistry

UG Programs	PG Programs	Ph.D. Program
B. Sc.(Hons) Chemistry	M. Sc. Chemistry M. Sc. Pharmaceutical Chemistry M. Phil. Chemistry	Ph.D. Chemistry
	Dual Degree	B.Sc.(Hons) – M.Sc.

(iii) School of Physics and Materials Science

Table 1.9 Programs taught in School of Physics and Materials Science

UG Programs	PG Programs	Ph.D. Program
B. Sc.(Hons) Physics	M. Sc. Physics M. Phil. Physics	Ph.D. Physics
	Dual Degree	B.Sc.(Hons) – M.Sc.

Overseas programs offered on campus   Not Applicable

Programs available for colleges to choose from   Not Applicable

1.2.2 Give details on the following provisions with reference to academic flexibility

a. Core / Elective options

As per recommendations of UGC, the University has adopted CBCS embodying academic flexibility in designing and developing programs and course curriculum. The course curriculum comprises of core, foundation and electives courses (subject based and choice based). Intensive practicals along with research/project form important components of curriculum..

b. Enrichment courses

The curriculum of both PG and UG programs include enrichment courses that enable the student to broaden his/her knowledge and vision.

Enrichment courses offered include Current Affairs, Business Awareness, Aptitude Development, Persona Enhancement, SPRINT, Social Projects, Written and Verbal Communication. The list is not comprehensive. In addition AutoCAD, Pro/e, CATIA etc. are offered by the Faculty of Engineering and Technology.

c. Courses offered in modular form

All courses at University are offered in modular form.

d. Credit accumulation and transfer facility

Yes, the University has a policy for credit transfer in UG and PG programs as per the recommendations of the University's equivalence committee.

e. Lateral and vertical mobility within and across programs, courses and disciplines

The University does offer lateral and vertical mobility in selected programs.

These include:

(i) Dual degree programs have the provision of vertical mobility in the following courses:

> **1. B.Tech.-M.Tech.** (Biotechnology, Food Technology, Mechanical Engineering, Civil Engineering, Computer Science Engineering, Electronics & Communication Engineering)
>
> **2. B.Tech.-MBA** (Biotechnology, Food Technology, Mechanical Engineering, Civil Engineering, Computer Science Engineering, Electronics & Communication Engineering, Bioinformatics, Nanotechnology)
>
> **4. B.Sc. (Hons.)-M.Sc.** (Zoology, Botany, Chemistry, Physics)

(ii) The University provides lateral mobility in B. Tech. programs after 1st year as per the guidelines of the UGC and required regulatory bodies.

1.2.3 Does the University have an explicit policy and strategy for attracting international students?

The University has a dedicated Office of International Affairs which does liaison with International Agencies/Universities to attract foreign students; however, formal admission process is dealt by the Admission Cell of the University. Students from South Korea and UK have visited the University for research and semester exchange programs.

1.2.4 Have any courses been developed targeting international students? If so, how successful have they been? If 'no', explain the impediments.

The University is in the early stages of developing such courses. The University has already developed a course – English as a Foreign Language for South Asian students.

1.2.5 Does the University facilitate dual degree and twinning programs? If yes, give details.

The university's dual degree programs are described in point 1.2.2 (e)

Presently no Twinning programs are being offered.

1.2.6 Does the University offer self-financing programs? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programs?

Not applicable as the University is self-financed.

1.2.7 Does the University provide the flexibility of bringing together the conventional face-to-face mode and the distance mode of education and allow students to choose and combine the courses they are interested in? If 'yes', give operational details.

Not applicable.

1.2.8 Has the University adopted the Choice Based Credit System (CBCS)? If yes, for how many programs? What efforts have been made by the University to encourage the introduction of CBCS in its affiliated colleges?

The University has adopted the CBCS from the Academic Session 2015-16 for all the courses being offered.

1.2.9 What percentage of programs offered by the University follow:

- Annual system   -   M. Pharmacy, starting from 2015-16 onwards
- Semester system   -   All, except M. Pharmacy and MBA
- Trimester system   -   None
- Quadmester system   -   MBA

1.2.10 How does the University promote inter-disciplinary programs? Name a few programs and comment on their outcome.

Shoolini University offers several inter-disciplinary programs as listed below.

Table 1.10 List of Inter-disciplinary Programs

S. No.	Program	Inter disciplinary programs	Offering Schools
1.	B. Tech.	Biotechnology	School of Bioengineering and Food Technology, School of Biotechnology
2.	B. Tech.	Food Technology	School of Bioengineering and Food Technology , School of Biotechnology

S. No.	Program	Inter disciplinary programs	Offering Schools
3.	B. Tech.	Bioinformatics	School of Electrical and Computer Science Engineering , School of Biotechnology
4.	B. Tech.	Nanotechnology	School of Electrical and Computer Science Engineering , School of Physics & Materials Science
5.	M. Tech.	Biotechnology	School of Bioengineering and Food Technology, School of Biotechnology
6.	M. Tech.	Food Technology	School of Bioengineering and Food Technology, School of Biotechnology
7.	M. Tech.	Food Technology	School of Bioengineering and Food Technology, School of Biotechnology
8.	MBA	Pharma & Healthcare	School of Business Management & Liberal Arts, School of Pharmaceutical Sciences
9.	MBA	Biotechnology	School of Business Management & Liberal Arts, School of Biotechnology

The outcome of the above programs is as follows:

Biotechnology, Food Technology, Nanotechnology and Bioinformatics are multidisciplinary in nature and hence, are offered jointly in partnership with different Schools of the Faculty and/or with one or two Faculties. Such programs enhance the overall competence of the students and better equip them to address complex problems. Same is true for programs like MBA Pharma and Healthcare and MBA Biotechnology.

1.3   Curriculum Enrichment

1.3.1   How often is the curriculum of the University reviewed and upgraded for making socially relevant and/or job oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?

It is done annually (or as needed) as referred in 1.1

1.3.2   During the last four years, how many new programs at UG and PG levels were introduced? Give details.

Inter-disciplinary Programs:

School of Biotechnology
2014-15
 - B. Sc. (Hons.) Microbiology with School of Bioengineering and Food Technology

School of Bioengineering and Food Technology
2013-14
 - M. Tech. Food Technology with School of Biotechnology

2014-15

 - M. Sc. Food Technology with School of Biotechnology

School of Biological and Environmental Sciences
2012-13
 - B. Sc. - M. Sc. Dual Degree Program in Zoology with School of Chemistry and School of Physics and Materials Science
 - B. Sc. - M. Sc. Dual Degree Program in Botany with School of Chemistry and School of Physics and Materials Science

School of Physics and Materials Science
2012-13
 - B. Sc. - M. Sc. Dual Degree Program in Physics with School of Chemistry and School of Biological and Environmental Sciences

School of Chemistry
2012-13
 - B. Sc. - M. Sc. Dual Degree Program in Chemistry with School of Biological and Environmental Sciences and School of Physics and Materials Science

School of Electrical & Computer Science Engineering
2011-12
- B. Tech. Bioinformatics with School of Biotechnology

2014-15
- B. Tech. Nanotechnology with School of Physics and Materials Science

Programs in emerging areas:

School of Biotechnology
2014-15
- B. Sc. (Hons.) Biotechnology
- B. Sc. (Hons.) Microbiology

School of Bioengineering and Food Technology
2010-11
- B. Tech. Food Technology

2013-14
- M. Tech. Food Technology
- Ph.D. Food Technology

2014-15
- M. Sc. Food Technology

School of Biological and Environmental Sciences
2011-12
- M. Sc. Botany

2015-16
- M. Sc. Zoology
- B. Sc. (Hons.) Zoology
- B. Sc. (Hons.) Botany

School of Physics and Materials Science
2015-16
- B. Sc.(Hons) Physics

School of Chemistry
2015-16
- B. Sc.(Hons) Chemistry

School of Electrical and Computer Science Engineering
2011-12
- B. Tech. Bioinformatics

2014-15
- B. Tech. Nanotechnology

School of Business Management and Liberal Arts
2010-11
- MBA Biotechnology

2013-14
- MBA Pharma & Health Care

1.3.3 What are the strategies adopted for the revision of the existing programs? What percentage of courses underwent a syllabus revision?

Shoolini University aims to produce quality workforce by providing its students adequate interaction with the leading subject experts from the academia and for providing industrial exposure. To ensure the said aim, a systematic and regular review process has been adopted for the development and revision of curriculum. Need for revision of programs and curriculum is identified in the meetings of Board of Studies which is a blend of academic and industrial experts. Emphasis is laid on the current needs and dynamic changes taking place in academics and corporate world.

The Academic Council initiates the process of revising of programs and curriculum which is guided by the feedback from students, potential employers, industry and alumni. Once the Board of Studies reaches a consensus on the revision of a program and curriculum, the recommended changes are forwarded to the Academic Council for discussion and final approval. In this process, some enrichment courses like aptitude development, written and verbal communications, persona enhancement etc., primarily focusing on skill development have been added to the curriculum over time.

Most of the courses underwent periodic revision since the inception of the University, catering to current needs and employment opportunities in the corporate and academic world. Time to time courses are revised to match the parameters of:

- o Employability,
- o Global changes,
- o System of values and ethics.

1.3.4 **What are the value-added courses offered by the University and how does the University ensure that all students have access to them?**

The University offers and designs value added courses and certifications from time to time. An illustrative list of such courses/ certifications includes:

- o Personality Enhancement courses
- o Aptitude and analytical skill courses
- o Refrigeration and Air-conditioning with Anand Automotive
- o Business Process Management with GENPACT
- o NET/ GPAT/ GATE
- o AMFI (Association of Mutual Funds in India) Certification
- o IRDA (Insurance Regulatory and Development Authority) Certification
- o Computerized accounting through TALLY
- o PT for physical fitness for first year students
- o Cyber Security

These Value added courses are announced well in advance and the program coordinators ensure the participation of interested students.

1.3.5 **Has the University introduced any higher order skill development programs in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?**

Yes. Shoolini University is conducting higher order skill development programs in consonance with the National Skill Development Corporation (NSDC), Life Sciences Sector Skill Development Council (LSSSDC) and other agencies. Some illustrative examples are:

- o **Under NSDC:** Online workshop conducted by IIT Kharagpur & IIT Bombay on Thermal Engineering & Fluid Mechanics by the Mechanical Engineering School.
- o **Under LSSSDC and NSDC:** Faculty of Pharmaceutical Sciences has started:
  - ▪ Medical Representative Course
  - ▪ Production Chemist Course
  - ▪ Quality Assessment Course
  - ▪ Quality Control Course
- o **Under Ministry of Human Resource Development (MHRD:** School of Electrical and Computer Engineering started conducting Free Open Source Software (FOSS) courses from IIT Bombay which is helpful for students to have exposure in technical topics.

1.4   Feedback System

1.4.1   Does the University have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

The University has a formal feedback system. Regular meetings are held with the Class Representative to get formal feedback both on the quality and content of the courses delivered. The feedback from Alumni is also obtained on the usefulness and the industrial relevance of the modules that are being offered.

The feedback so collected is used for revision/up gradation of the course. This is also taken into consideration during the performance appraisal of the faculty members.

1.4.2   Does the University elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and its impact.

The University gets feedback on curriculum from national and international faculty. Based on such feedback, few need based courses have been added to the curriculum of different programs overtime. Feedback is collected at different levels through the following methods:

  o Inclusion of external faculty members in Board of Studies and Academic Council.
  o Online discussions with the national and international faculty
  o Getting feedback on the curriculum from the external experts
  o Tie-ups with industries and academic institutes

1.4.3   Specify the mechanism through which affiliated institutions give feedback on curriculum enrichment and the extent to which it is made use of.   Not Applicable

1.4.4   What are the quality sustenance and quality enhancement measures undertaken by the University in ensuring the effective development of the curricula?

Effective development of curricula is achieved through the well-defined process (Fig 1.1) as a result of which the University is now ISO 9001:2008 certified for education and research work which itself indicate a process of continuous improvement in academic pursuits.

Any other information regarding Curricular Aspects which the University would like to include.

The SPRINT program has proved to be a major success story of Shoolini University. It has led to development of the students in:

- o Key functional and soft skills
- o Global competencies
- o Values and ethics; Confidence
- o Writing formal and informal documents
- o Carrying of persona and Power dressing
- o Telephone and Table manners

CRITERION II: TEACHING – LEARNING AND EVALUATION

Shoolini University is committed to provide students with opportunities to learn from and interact with top most experts in their field of expertise. The University endeavors to develop into an internationally recognized center of education and research in the Himalayas. The educational programs have societal significance and are focused towards enhancing personal development and employability. The teaching faculty in the University is comparable to any good educational institution from across the globe. Teachers are evaluated based on the classroom performance through periodical feedback from the students. This has gone well with the students and teachers also give their best in teaching.

The tutorials and mentorship to students help to create self confidence in the student community. The up-skill through SPRINT programs is an innovative initiative of the University which helps the students to develop personality and build their level of confidence. The University is supportive in providing quality infrastructure facility to teachers and students and the existence of e-library, online courses, Wi-Fi campus etc. are ready instances. The University has a dedicated and student driven proactive 'Placement and Career Development Cell' to look after activities related to career development, training and placement of students.

2.1 Student Enrolment and Profile

2.1.1 How does the University ensure publicity and transparency in the Admission process?

In order to ensure the required publicity proper advertisements are issued in local and national newspapers, TV Channels, FM Radio, University's website, and also through handbills and inserts in newspapers and outdoor hoardings. University publishes annual prospectus (information brochure) providing details of all courses with their eligibility criteria and elaborating the admission procedure, as also the facilities available in the University. All admissions are made as per the guidelines of the Himachal Pradesh Private Educational Institutions Regulatory Commission/ PCI/ UGC/AICTE. List of all admitted students for each program is posted on the University's website and the Schools' notice boards. The University does not have any Management quota.

2.1.2 **Explain in detail the process of admission put in place by the University. List the criteria for admission: (e.g.: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv)Common entrance test conducted by state agencies and national agencies (v) other criteria followed by the University.**

The process of admission and the criteria adopted for different degree programs is as per the norms of regulatory bodies. The approved courses are advertised and online and direct applications received are sorted out based on eligibility criteria. The admission criteria as followed by the University are given below:

Table 2.1 List of programs with criteria of admission

S. No.	Criteria for admission	Program
1	Merit	• B.Sc. (Hons) Botany, Zoology, Physics, Chemistry • B.Sc. Microbiology • B.Sc. Biotechnology • B.Com. (Hons) • B. Tech./ B. Pharma (LEET) • B.A. (Hons) Economics
2	Entrance Test	• M. Sc.
3	Merit with entrance test	• B.B.A.
4	Merit, entrance test and interview	• M. Phil. • Ph. D.
5	Common entrance test conducted by state agencies and national agencies	• B. Pharma. • B. Tech. (EE, CSE, Civil, Mechanical, Bioinformatics, Nanotechnology, Food Technology, Biotechnology) • M. Pharma. • M. Tech. • MBA

2.1.3 **Provide details of admission process in the affiliated colleges and the University's role in monitoring the same.**   Not Applicable

2.1.4 Does the University have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?

The University has an Admissions Committee having representatives of each faculty under the chairmanship of the Vice Chancellor which formulates the guidelines for admissions and reviews the admission process and profiles of admitted students on an annual basis. The Committee has the mandate to monitor and ensure adherence of rules and regulations for admissions, as specified by regulatory bodies, both for eligibility criteria and conduct of the entrance tests. The University has put in place 'single window counseling' for prospective students and parents relating to matters concerning admissions and the facilities being made available.

On the other hand, analysis of admissions is conducted periodically so as to make changes to draw students from all sections of the society. As a result of these strategies, admissions in the University has been on the rise progressively. Amongst the sixteen private universities in the state, Shoolini University attracts the highest number of students.

2.1.5 What are the strategies adopted to increase / improve access for students belonging to the following categories:

As a conscious decision Shoolini University endeavors to contribute to national development by providing equal education opportunities to all, especially for the upliftment of the rural youth. Within this overarching aim, University adheres to the norms/rules made by the UGC and GOI for the varied sections of the society; few initiatives in this respect are as under:

Table 2.2 Policies to increase/improve student enrolment

S. No.	Category	Policy to increase/improve student enrolment
1	SC/ST	• Relaxation in admission eligibility as per State and GOI norms • Reservations are ensured as per the policy of the Government of Himachal Pradesh
2	OBC	• Relaxation in percentage • Reservations are ensured as per State and GOI norms
3	Women	• Scholarships are provided to single girl child • 5 percent relaxation for women candidates

S. No.	Category	Policy to increase/improve student enrolment
4	Economically weaker sections	• Scholarships are provided as per State and GOI norms
5	Persons with varied disabilities	• Reservations are ensured as per State and GOI norms
6	Outstanding achievers in sports and other extracurricular activities	• Relaxation in percentage as per University norms

2.1.6 Number of students admitted in University departments in the last four academic years.

The trend for last four academic years with respect to different categories and gender is enumerated below:

Table 2.3 Category wise list of students admitted in University in the last four academic years

Categories	Year 1 (2011-12)		Year 2 (2012-13)		Year 3 (2013-14)		Year 4 (2014-15)	
	M*	F*	M	F	M	F	M	F
SC	45	27	48	35	56	32	42	30
ST	14	5	33	13	12	8	30	8
OBC	16	12	43	16	32	17	38	27
General	375	247	374	283	382	273	377	294
Others**	-	-	-	-	-	-	03	-
Total*	**450**	**291**	**498**	**347**	**482**	**330**	**490**	**359**

M* Male; F* Female

** International
*** includes integrated students also

2.1.7 **Has the University conducted any analysis of demand ratio for the various programs of the University departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase / decrease.**

In the initial period of University establishment, the demand ratios in comparison with number of seats and applications received were equal. However, during the last one year the demand ratio increased marginally in UG and PG programs while in M.Phil. and Ph.D. programs the increase was significant. The trend during the previous academic session is as follows:

Table 2.4 Demand ratio for the various programs (2014-15)

Programs	Number of applications	Number of students admitted	Demand Ratio
UG	593	538	1:1.1
PG	272	246	1:1.1
Integrated Masters	22	22	1:1
M.Phil.	17	11	1:1.5
Ph.D.	49	32	1:1.5

2.1.8 Were any programs discontinued/staggered by the University in the last four years? If yes, please specify the reasons.

Some courses could not be started/discontinued due to shortage of the requisite students in accordance with the norms of HP-PERC.

Table 2.5 List of programs discontinued/staggered by the University in the last four years

S. No.	Name of Program		Year of Dropping	Remarks
1	M.Pharma	Biotechnology	2015-16	As per guidelines issued by the HP Private Educational Institutions Regulatory Commission, no program can be started with less than 5 students.
		Quality Assurance	2014-15	
		Pharmacognosy	2014-15	
2	M.Sc. Biochemistry		2014-15	
3	M.Tech. Environment Science∗		2014-15	
4	M.Sc. Environment Science∗		2012-13	

S. No.	Name of Program	Year of Dropping	Remarks
5	Master of Public Health	2015-16	Lack of student response
6	BSc. Physiotherapy	2014-15	

∗ MSc. Environment Science was changed to M.Tech. Environment Science w.e.f. 2012-13. However, in the academic year 2014-15 it was dropped because only one student was admitted.

Electrical and Electronics Engineering was re-designated as Electrical Engineering w.e.f. the academic session 2014-15.

2.2 Catering to Student Diversity

2.2.1 Does the University organize orientation/ induction program for freshers? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.

Yes, the University organizes induction programs at the start of formal semester classes through a 'two stage' orientation. This is separate for UG, PG and M.Phil./ Ph.D. students.

In the first stage, a 'two day' induction is centrally conducted in which Statutory Officers of the University, including the Vice Chancellor, Registrar, Deans and External experts (industry/academic) address the students. They are also briefed about academic rules, the examination and evaluation system, ethics and values of the institution, dress code etc. In addition, they are briefed about the procedure of reporting and/or mitigating grievances and the anti-ragging instructions. An exposure is also provided regarding the management and academic activities, utilization of IT infrastructure and the use of Passwords and Protocols. This is followed by a guided tour wherein utilization of facilities at the Yogananda Knowledge Center, labs, hostels and the clubs are explained.

This is followed by a one day orientation program by the respective Schools to familiarize students with their course curriculum, School structure, faculty introduction, course registration and career counselling.

Once the students adjust to the University environment, a special induction SPRINT program is organized school wise, in which emphasis is on breaking the ice and enhancing the confidence levels of the students.

Feedback on the utility of the orientation program is obtained at the end of the SPRINT module, as also through Student-Teacher Committees and

informal interaction. The feedback received is used to improve facilities and to streamline the procedures for subsequent years.

2.2.2 Does the University have a mechanism through which the "differential requirements of the student population" are analyzed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

Though the University has no formal mechanism to identify differential requirements at the time of admissions, this emerges after interaction at the School level, due to the 'mentor-mentee system'. Notwithstanding, since this has emerged while preparing this report, this will be implemented from the current academic year.

2.2.3 Does the University offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department wise/faculty-wise?

Yes, the University offers bridge / remedial / add-on courses which are either incorporated in the regular timetable or are provided in the zero hour. A few add-on/bridge courses have also been introduced primarily to improve communication and analytical skills of the students. Some of these are enumerated below:

Table 2.6 List of bridge / remedial / add-on courses offered by University

S. No.	Faculty	Bridge / Remedial / Add-on courses
1.	Applied Sciences and Biotechnology	• Mathematics for medical and Biology for non-medical students • Special coaching classes for NET / SLET/ GATE • Language courses • Persona enhancement • Aptitude development
2.	Basic Sciences	• Persona enhancement and Communication skill development courses • Special coaching classes for NET / SLET • Language courses

S. No.	Faculty	Bridge / Remedial / Add-on courses
3.	Management Sciences & Liberal Arts	• Persona enhancement • Aptitude development • AMFI Certification • Banking & Insurance • Tally for B. Com (Hons) • Written & Verbal communication • Modules on basics of marketing, finance, human resource and organizational behaviour, economics and operations etc.
4.	Pharmaceutical Sciences	• Communication skill development courses • Mathematics for medical and Biology for non-medical students
5.	Engineering & Technology	• Persona enhancement • Physical Training • Industrial visits • In-plant trainings • Certificate Courses

2.2.4 Has the University conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc.? If yes, what are the main findings?

(*Please refer to reply in 2.2.2)*

2.2.5 How does the University identify and respond to the learning needs of advanced learners?

Shoolini University identifies advanced learners based on their academic achievement, aptitude and performance during the SPRINT program. Such students are encouraged to get involved in challenging projects and outreach programs offered by the university. Advanced learners are given priority to visit advanced facilities in India and abroad under Student Exchange programs so as to maximize their exposure and broaden their outlook.

2.3 Teaching-Learning Process

2.3.1 How does the University plan and organise the teaching, learning and evaluation schedules (academic calendar, teaching plan, evaluation blue print, etc.)?

Academic calendar for the academic year is circulated to all; it includes the teaching part, term exams, extracurricular activities, holidays and the vacation periods.

The concerned subject teacher in accordance with assigned learning objectives prepares proper teaching plans.

Evaluation is done based on 50% marks for internals and 50% for externals. Final evaluation is done based on double blinded process i.e. evaluated after putting secrecy numbers and the results are uploaded on the University's website within the prescribed time.

2.3.2 Does the University provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?

Yes, course outlines and schedules are worked out prior to commencement of the semester which are uploaded on the eUniv and given to students by respective teachers in the beginning of the semester. The lecture schedule includes the course content, suggested readings and lecture wise details of topics and their learning objectives. Feedback from students and teachers reveals that this is effective as the students also come prepared for class.

2.3.3 Does the University face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.

In general, the curriculum runs smoothly as per the pre-planned lecture schedules for each course. However, in special cases like illness of some faculty members, extra classes are conducted to complete the syllabus. As a policy the University does not relieve outgoing faculty members during the semester; in exceptional cases, however, if allowed, the University ensures immediate replacements or other internal arrangements are put in place.

2.3.4 How is learning made student-centric? Give a list of participatory learning activities adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

The University has adopted following participatory activities for holistic development and enhanced learning of students with the aim that the students are enthused for the quest for knowledge. Some of the measures taken are:

- o Interactive sessions in classes/talks/lectures.
- o Class presentations and project reports.
- o Industrial visits/Field visits/Guest lectures and exchange programs.
- o Surprise tests and quizzes with on the spot feedback.
- o Exhibitions (science and engineering).
- o Participation in curricular, co-curricular and extracurricular activities at inter and intra-University competitions (symposia, declamation contests, participation in clubs, tech fests, sports, cultural events, etc.).
- o Involvement in social activities, such as, plantation, cleanliness, blood donation, awareness camps, school adoption program, etc.

2.3.5 What is the University's policy on inviting experts/ people of eminence to deliver lectures and/or organize seminars for students?

Shoolini University adopts an open policy and follows a proactive strategy to invite experts from various fields who through their talks not only motivate students but also contribute towards greater learning and facilitate research.

Guru Talks are conducted every fortnight, by eminent people from all walks of life to interact with the students and broaden their outlook. Seminars, guest lectures, workshops, panel discussions and brainstorming sessions are organized regularly involving internal as well as external experts by various schools.

National and international agencies like Fulbright Foundation in India, British Council and other organize presentations with the aim of enhancing learning, sensitization on relevant issues, providing exposure to career opportunities.

During the SPRINT program, experts are invited on a regular basis e.g. to prepare students for placement. This is done utilizing external support which facilitates "Campus to Corporate" transition of students.

Alumni who have distinguished themselves in various fields are also invited to share their experience besides the student clubs and societies have their

own functions and invite distinguished people for lectures from time to time.

2.3.6 Does the University formally encourage blended learning by using e-learning resources?

Yes, eUniv platform of Shoolini University and Learning Management System (LMS) tool is proliferating learning and has proved to be very effective. Under this initiative, in order to augment/supplement teaching the students and faculty are issued a unique login ID to facilitate access for all courses taught in the semester.
This also serves as a one point solution for a student to know his/her current standing in various assignments, quizzes, surprise tests, term exams etc. The initiative is gaining momentum and is functional in Business Management and Computer Science Schools; from the current academic year, University plans to develop the same for other Schools as well.

2.3.7 What are the technologies and facilities such as virtual laboratories, e-learning, open educational resources and mobile education used by the faculty for effective teaching?

As the campus is fully Wi-Fi enabled, the faculty can access internet even during the class hours, facilitating effective teaching. Moreover the faculty also leverages the use of University's LMS called eUniv for conducting online quizzes and digitized assignment which further facilitates teaching.

Every faculty member uses laptop with Wi-Fi connection for appropriate execution of the academic as well as research activities, enabling faculty members to prepare their own course material. Video lectures such as from NPTEL, MIT Open courseware and from other sources can also be downloaded by the faculty.

Virtual laboratories are used in Engineering and technology courses and the University is planning to extend virtual class room facility across the campus as use of LCD and smart classroom facility enhances the teaching and learning experience.

2.3.8 Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the University's educational processes?

Yes, there is designated group to collate, review and integrate Open Source Inputs for improving on the University's educational process. The group is constituted under the Chief Information Officer and the Chief Knowledge

Officer, who jointly review the spectrum of Open Sources. Based on their utility and suitability, the same are incorporated through KMS:

- o eUniv using the KMS provides various online courses.
- o KMS provides access to various open sources which have been downloaded in the central repository and made available to the students (all papers published by University are available in KMS)
- o University has tied up with IIT Bombay where the students and faculty have access to their Open Source Technologies/courses e.g. Ruby, Python, Scilab etc.
- o All talks conducted in the University are also available on You-tube through the KMS.

2.3.9 What steps has the University taken to orient traditional classrooms into 24x7 learning places?

The University has taken pro-active steps to transform classrooms into continuous learning places. All classrooms are ICT enabled and auditoriums are interconnected with video-conferencing facilities, enhancing the learning experience. More importantly, leveraging the eUniv and the LMS platform, classroom learning has been transformed into a 24x7 experience. In addition, learning resources made available through the KMS provided under the aegis of the Yogananda Knowledge Center, supplement learning and provide 'out of classroom' teaching.

2.3.10 Is there a provision for the services of counsellors/ mentors/ advisors for each class or group of students for academic, personal and psycho social guidance? If yes, give details of the process and the number of students who have benefitted.

Students are provided counseling and guidance at multiple levels – from the time they are admitted, until they graduate from the University.

- o Centralized Admission Cell guides all new students to help them familiarize with the campus facilities and University rules.
- o Students get assigned to a faculty mentor in groups. The mentor provides guidance to his/her mentees in both academic and personal matters till the time individual students got placement.
- o In addition, project guides are also nominated who guide the students for their project work.
- o The Dean Student Welfare, Dean of Resident Students' and Dean Academic Affairs oversee all initiatives and actions related to students' safety and welfare in the campus and hostels.

- o The 'Placement and Career Development cell' provides counseling and facilitation for placement and career development of the students.
- o Alumni associations and various Clubs have been formed with active participation of ex-students and faculty for students to guide and familiarize them with the requirements and expectations from the industry and the corporate world.
- o Office of International Affairs counsels and facilitates students to participate in exchange programs with global universities, and also to enroll in their internship and PG/ Doctoral programs.

2.3.11 Were any innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

The University believes in continuous quality improvement. The following innovative measures are taken to cater to the changing requirements of the students and improving teaching methodology:

All lectures are delivered through power point from 2013, and since then, almost all the lectures and supplementary study material is being made available online to the students through the eUniv. The University is gradually moving towards 100 percent digitized teaching and for providing online supplements to every course that is being offered in the campus.

Emphasis has also been laid in the past few years to provide Lecture Schedules at the beginning of the semester, to incorporate more case studies, projects, workshops, seminars, video conferencing and group discussions in the curricula to enhance the skills of the students.

2.3.12 How does the University create a culture of instilling and nurturing creativity and scientific temper among the learners?

Shoolini University being a research driven University has been proactive in nurturing creativity and scientific temper among its students through various initiatives. The forums like research seminars, conferences, workshops, training programs, group discussions and activity clubs help in keeping the students informed about the latest developments in the field and instill creativity and scientific temper as per the following initiatives:

- o Interactive classroom sessions based on live industry videos.
- o Seminars, presentations, Case study discussions, Group discussions on current issues and subject matter.

o Research projects have been made compulsory for all programs.
o Interactive sessions with eminent speakers under 'Guru Series.'
o Interactive sessions under 'Corporate to Campus' conducted.
o Workshops, seminars, conferences on scientific activities are conducted.
o Tech Fest is organized annually.

Different clubs like 'Raagrang' for music and dance, 'Saamarthya' for entrepreneur development, 'Baawle Bawarchi' for cooking, 'Shutterbugs' for photography, 'Dramebaaz' for drama, the Tracking and Hiking club, etc. are functional under the umbrella of 'Abhiruchi' where students get an opportunity to showcase their talent in different fields. Students are encouraged to celebrate and participate in various other events like cultural programs, quizzes, fests, women's day, pharmacist day, blood camps, painting and rangoli exhibitions etc.

2.3.13 Does the University consider student projects mandatory in the learning program? If yes, for how many programs have they been (percentage of total) made mandatory?

Yes, the curriculum mandates student projects for a wide range of courses and these projects are undertaken both internally as well as with external institutes/industries and are part of the course, making it 100%.

Table 2.7 List of external institutions associated with the University for Students Project Work and role of faculty in facilitating such projects

S. No.	Faculty	Name of external institutions associated with the University for Students Project Work	Role of faculty in facilitating such projects
1	Faculty of Management Sciences & Liberal Arts	• Oliver Wyman • GENPACT • ICICI Prudential • Kotak Group • ICICI Securities • Orbit Biotech • World Gold Council (WGC) • Mondelez • Agilent	Student monitoring, Guidance in Questionnaire Development, Data Collection, Analysis, Collation & compilation of Project Report

S. No.	Faculty	Name of external institutions associated with the University for Students Project Work	Role of faculty in facilitating such projects
2	Faculty of Applied Sciences and Biotechnology	• SantLongowal Institute of Engineering and Technology	The faculty member from the host institute is the Guide for projects
3	Faculty of Basic Sciences	• Gachon University, South Korea • Suwon University, South Korea • Chung Yuan Christian University, Taiwan	Student monitoring and guidance
4	Faculty of Pharmaceutical Sciences	• IIIM, Jammu • NIPER, Mohali • NIMR, New Delhi • PGI, Chandigarh	Student monitoring and guidance
5	Faculty of Engineering & Technology	• DAMCO • Tata Consultancy Service • HCL Technologies • Bebo Technologies • Anand Group	Student monitoring and guidance

2.3.14 Does the University have a well-qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?

The University has 175 faculty members who come from the best institutions around the world. Within this, the percentage of faculty with Ph.D. is given below:

- o Faculty of Applied Sciences and Biotechnology - 75%.
- o Faculty of Basic Sciences - 74%.
- o Faculty of Pharmaceutical Sciences -50 %
- o Faculty of Engineering and Technology – 20 %
- o Faculty of Management Sciences & Liberal Arts - 27 %

The rest of the faculty has proven academic/research records and comprise of highly skilled and passionate scholars; some of whom are continuing their research and are committed to complete their Ph.D. in the next four so as to meet its target of 90 percent. In addition, Shoolini University is

committed to nourish and upgrade the knowledge threshold and teaching skills of its faculty members. This is ensured through faculty orientation and development programs, conferences, workshops, training programs to meet future challenges in their fields.

Shoolini University has more than 33 faculty members and experts under Eminence and Visiting Faculty categories which ensures a good blend of theoretical and practical input to the students (for details refer 2.4.5). Currently, there is no shortage of teachers and teacher-taught ratios meets the requirement of UGC and other Regulatory bodies.

2.3.15 How are the faculty enabled to prepare computer-aided teaching/learning materials? What are the facilities available in the University for such efforts?

All faculty members are proficient in handling computers and this allows for optimal use of the LMS platform. Laptops and projectors are made available to teachers for computer-aided teaching/learning. The LMS helps faculty members to upload PPTs, learning materials and e-learning resources so that students have access to reading materials through the university website. While, faculty members cover the entire portions through normal teaching, the eUniv LMS helps the students to learn at their own pace. Blogs are developed by some faculty members so that the students can interact with the subject teacher and also with class mates for clarifying doubts and sharing their understanding of the subject.

The eUniv Team organizes workshops for preparing audio/ video slides, which might aid student learning more when compared to learning from regular slides (without audio). These videos are then made available to all the students and staff via the eUniv LMS platform.

2.3.16 Does the University have a mechanism for the evaluation of teachers by the students/ alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?

Students of the University are provide feedback based on which, teachers are graded into five categories e.g. Excellent, Very Good, Good, Satisfactory and Poor. The feedback contains information on punctuality, course contents, delivery, language, timely evaluation, use of innovative technology, knowledge of the subject etc. The evaluation feedback of teachers is used for improving the quality of the teaching-learning process. Alumni feedback is also sought for enhancing the teaching-learning process.

2.4 Teacher Quality

2.4.1 How does the University plan and manage its human resources to meet the changing requirements of the curriculum?

The University is proactive in developing its faculty members in order to meet the requirements of a modern curriculum through various Faculty Development Programs, training sessions, workshops, conferences, visits to other institutes and frequent interactions with the experts from various fields of specialization.

Shoolini University follows a systematic process to ensure the availability of highly specialized human resources. Depending on the revision of the curriculum, requirement of knowledge domain specialist is identified at the School level which is then proposed to the registrar for approval from Vice-Chancellor and University Management. Once the requirement is approved, the recruitment process begins with advertisements of the posts in newspapers and University website giving the detailed job description and specifications. Applications received are scrutinized based on the compatibility of the candidates. Shortlisted candidates appear for personal interview before the expert panel, including external subject experts, constituted by the University.

2.4.2 Furnish details of the faculty:

The University has a pool of regular faculty along with those who are adjunct, emeritus, eminence and visiting faculty. The regular faculty is listed in the table as permanent teachers. All other categories that come to the University for specific purpose and for specific time are given in the table as part time teachers. The category wise number of the teachers is given as follows:

Table 2.8 Details of the faculty

Highest Qualification	Professors		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
D.Sc./D. Litt./Post Doc.	8	1	4	1	6	1	21
Ph.D.	7	-	12	2	19	5	45
M.Phil.	-	-	-	-	3	5	8
PG	2	-	11	1	56	30	100

Temporary Teachers - NIL							
Part-time Teachers							
D.Sc./D. Litt./Post Doc.	10	1	-	-	-	-	11
Ph.D.	14	-	-	-	-	-	14
M.Phil.	-	-	-	-	-	-	-
PG	7	-	-	-	-	3	10

2.4.3 Does the University encourage diversity in its faculty recruitment? Provide the following details (department /school-wise).

Yes, the University encourages diversity as can be inferred from details provided below.

Table 2.9 Faculty wise diversity in recruitment

S. No.	Faculty	% of faculty from the same University	% of faculty from other Universities within the State	% of faculty from Universities outside the State	% of faculty from Universities outside India
1	Applied Sciences and Biotechnology	8	32	56	4
2	Management Sciences and Liberal Arts	11	46	35	8
3	Engineering and Technology	8	47	41	4
4	Pharmaceutical Sciences	18	-	82	-
5	Basic Sciences	12	59	30	-

2.4.4 How does the University ensure that qualified faculty are appointed for few programs/ emerging areas of study (Biotechnology, Bio-informatics, Material Science, Nanotechnology, Comparative Media Studies, Diaspora Studies, Forensic Computing, Educational Leadership, etc.)? How many faculty members were appointed to teach new programs during the last four years?

The policy of the University is to retain distinguished faculty members with outstanding qualifications. The existing faculty is upgraded and training on emerging areas of study is encouraged and initiated.

Once the emerging area program is approved, the University calls for applications through open advertisement and interviews candidates through a high level committee which includes renowned experts in the field as per the University Act and Statutes. The interview details are listed and documented in the form of Selection Committee proceedings. The proceedings are later verified and approved by the concerned bodies of the University.

During the last four years, five Professors, five Associate Professors and twenty-two Assistant Professors have been appointed in the field of Biotechnology, Food Technology and Bioinformatics by the University.

2.4.5 How many Emeritus / Adjunct Faculty / Visiting Professors are on the rolls of the University?

The University has a policy to appoint Emeritus, Adjunct and Visiting Professors. The list is given below:

Table 2.10 List of Emeritus / Adjunct Faculty / Visiting Professors

S. No.	Name	Organization	Faculty
		Professors of Eminence	
1.	Prof. S. C. Tiwari	Ex Professor and Head, Department of Management Dr Y. S. Parmar University, Horticulture and Forestry Nauni Solan	Management Sciences & Liberal Arts
2.	Prof. R.C. Mahajan	Ex Professor, PGIMER,Chandigarh, Ex President INSA	Applied Sciences & Biotechnology

		Professors of Eminence	
3.	Dr.Umesh Kumar Kohli	Retd. Professor Dr Y. S. Parmar University of Horticulture and Forestry Nauni Solan	-do-
4.	Dr. D.R. Sharma	Dean, Department of Biotechnology, Dr. Y.S. Parmar University, Solan	-do-
5.	Prof. Manoranjan Kalia	Dean Faculty of Home Science H.P. Agricultural University, Palampur	-do-
6.	Dr.Subhash Chander	MD & CTO, Connecticut Clean Energy Fund	Engineering & Technology
7.	Dr. S.R. Prabhaker	PEC University, Chandigarh	-do-
8.	Dr. J.P. Soni	Punjab Agricultural University, Ludhiana	-do-
9.	Er. C.P. Mahajan	Ex. Chief Engineer (OP) North HPSEB.	-do-
10	Dr. G.S. Virdi	Ex. Senior Scientist-cum-Administrator, CSIR-Central Electronics Engineering Research Institute (CEERI), Pilani	-do-
11.	Dr. J.M. Julka	Ex. Joint Director Zoological Survey of India	Basic Sciences
12.	Dr. Arundeep Ahluwalia	Professor, Centre of Advanced Study in Geology, Panjab University, Chandigarh,	-do-
13.	Prof. P.S. Kalsi	PAU, Ludhiana, Punjab	-do-
14.	Dr. J.D. Sharma	Bells Institute of Management and Technology Mehli, Shimla	-do-

Adjunct Professor			
1.	Ms. Andrea Wright	Assistant Professor, Brown University, USA	Management Sciences & Liberal Arts
2.	Dr.Manoj K Kashyap	Moores Cancer Center, Univ of California, USA	Faculty of Applied Sciences & Biotechnology
3.	Prof.Ashley Braganza	Brunel University London	Faculty of Management Sciences & Liberal Arts
4.	Dr.Koushik Das Sarma	Sudershan Chemicals, Pune	Faculty of Pharmaceutical Sciences
5.	Dr. Paras Parkash	Managing Principal, Consultant, Pantellisense Research,Shimla	-do-
6.	Dr. Suman Bala Beri	Professor, Department of Physics, Panjab University, Chandigarh	Faculty of Basic Sciences
7.	Dr. IS Dua	Former Professor (Plant Molecular Physiology); Former, Chairman, Department of Botany Panjab University, Chandigarh, Punjab	Faculty of Basic Sciences
Visiting Faculty			
1.	Prof.S.S.Bari	Professor, Department of Chemistry,Himachal Pradesh University,Shimla.	Faculty of Basic Sciences
2.	Mr.M.L.Sharma	Consultant ICON Ltd., Mumbai	Faculty of Basic Sciences
3.	Dr.Amarjeet Singh	President, R&D, Regulatory Affairs,Tirupati Medicare Ltd., Paonta Sahib, H.P.	Faculty of Pharmaceutical Sciences

		Visiting Faculty	
4.	Dr,Kamal Dua	School of Biomedical Sciences and Pharmacy, University of New Castle,NSW,Australia.	-do-
5.	Mr.Sumit Gupta	Director, Meridian Medicare Ltd., Solan,H.P.	-do-
6.	Dr.Hyoung In Lee	Professor, Seoul National University,South Korea.	Faculty of Engineering & Technology
7.	Dr.S.C.Mullick	Professor ,IIT Delhi	-do-
8.	Mr.Rajinder Abhange	Chief Technical Officer, Gabriel India Ltd.	-do-
9.	Mr.S.Acharya	Chief Technical Officer, Anand University	-do-
10.	Mr.Pravesh Srivastava	Group President, Anand Automative Ltd.	-do-
11.	Maj Gen AK Chaturvedi (Retd)	Indian Army	-do-
12.	Dr. B. B. Lal Kaushal	Retd. Professor Dr Y. S. Parmar University of Horticulture and Forestry Nauni Solan	Faculty of Applied Sciences & Biotechnology

2.4.6 What policies/systems are in place to academically recharge and rejuvenate teachers (e.g. providing research grants, study leave, nomination to national/international conferences/seminars, in-service training, organizing national/international conferences etc.)?

Shoolini University adopts a proactive approach in academically recharging and rejuvenating its teachers in order to motivate them. The important measures/policies are highlighted below:

1. Shoolini University has a research driven model wherein teachers pursue research as part of regular academic activity. Faculty members are being accorded research and development grants from various funding agencies, and it is the endevour of the university to raise these to 50 crores in the next three years.

2. As a policy, separate research labs along with basic facilities and consumables is provided for all the faculty members who have externally funded research projects. A strategy to provide financial incentives to faculty members being awarded projects is underway.
3. Faculty members are encouraged to improve their academic qualifications by getting themselves registered for Ph.D, either in-house or from outside and for that study leave is granted.
4. Participation in national and international conferences/ seminars/ training programs/FDP's are encouraged by providing paid duty leave with partial financial assistance on case to case basis.
5. Faculty members are also encouraged to organize similar events on campus.

2.4.7 How many faculty received awards / recognitions for excellence in teaching at the state, national and international level during the last four years?

1. Prof. P K Khosla, Vice Chancellor:
   o Education Entrepreneur of The Year 2012 by Associate Chambers of Commerce (ASSOCHAM);
   o ShikshaRatan 2012 by All India Technical and Management Association (AITMA).
2. Prof. Atul Khosla, Pro Vice Chancellor:
   o Visionary Leader Award 2014 by CAREER OPTIONS for excellence in education at the 3rd Higher Education Summit, New Delhi.

2.4.8 How many faculty underwent staff development programs during the last four years (add any other program if necessary)?

The University's policy encourages professional and personal development of faculty. The University sponsors its employees in developing proficiency for training programs, workshops, conferences etc. The University also arrange in-house training to enhance skills and knowledge. The number of faculty who undertook various improvement programs are listed below:

Table 2.11 List of faculty underwent staff development programs

Academic Staff Development Programs	Total: Shoolini University
Refresher courses	07
HRD programs	07
Orientation programs	30

Academic Staff Development Programs	Total: Shoolini University
Staff training conducted by the University	113
Staff training conducted by other Colleges/ University	56
Summer / winter schools, workshops, etc.	190
Any other (please Specify)	25

2.4.9 What percentage of the faculty have:

Table 2.12 Percentage of the faculty as resource persons, participated in external events, presented papers, teaching experience in other universities, industrial engagement etc.

Faculties	Percentage					
	1*	2	3	4	5	6
Engineering and Technology	11	39	24	35	13	1
Management Sciences & Liberal Arts	19	35	15	38	42	7
Basic Sciences	60	100	80	80	-	10
Applied Sciences & Biotechnology	25	70	50	10	10	-
Pharmaceutical Sciences	50	100	100	70	50	-

*
1. **Resource persons**
2. **Workshops/ seminars/ conferences**
3. **Presented papers**
4. **Teaching experience in other universities /institutions**
5. **Industrial engagement**
6. **International experience in teaching**

2.4.10 How often does the University organize academic development programs (e.g.: curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc.) for its faculty aimed at enriching the teaching learning process?

The University has School-wise Board of Studies, which includes external experts from the academia and industry, to review the academic progress and also to review the existing curriculum, teaching pedagogy and evaluation process. The Boards of Studies meet biannually, generally before the commencement of new semester; however, the meetings can vary from School to School, as per requirements.

School Academic Committees consisting of all the faculty members meet frequently to identify the need for revision in curriculum and course content. The entire process is guided by external experts.

Shoolini University has also initiated a repository of teaching materials used in different courses under its eUniv initiative. In addition, a Knowledge Management System has been established that offers a fully online library as an aid to advanced learning and knowledge.

2.4.11 Does the University have a mechanism to encourage;

*Mobility of faculty between universities for teaching?
*Faculty exchange programs with national and international bodies?
If yes, how have these schemes helped in enriching the quality of the faculty?

Yes, Shoolini University encourages faculty members for exchange programs with national and international bodies. Specific focus has been on:

1. Faculty deliver lectures on predefined areas in outside institutions.
2. Joint Research Projects are encouraged with National and International Institutions of repute.
3. Faculty is encouraged to participate in research consultation.
4. MoU's are in place with a number of academic and research institutions around the world including, Seoul National University, South Korea; Lanzhou University, China; etc.

2.5   Evaluation Process and Reforms

2.5.1   How does the University ensure that all the stakeholders are aware of the evaluation processes that are in place?

Evaluation process of the University is explained to the students and parents at multiple levels:

1. At the time of admission in the form of counseling.
2. The registration process provides all the details regarding courses, instructor, and method of evaluation, pass criteria etc. In addition each student is given a handbook as a ready reckoner.
3. Annual Academic calendar is posted on eUniv.
4. Faculty Deans and program coordinators keep updating students about changes in the evaluation system, if any.

2.5.2 What are the important examination reforms initiated by the University and to what extent have they been implemented in the University departments and affiliated colleges? Cite a few examples which have positively impacted the examination management system.

Semester system with a continuous evaluation consisting of surprise tests, assignments, quizzes, mid-term examinations and end-term examination is followed. In addition, research projects at UG and PG levels are evaluated.

The university has initiated online examinations. Currently the practice has been adopted in Computer Science discipline of the Faculty of Engineering and Technology and the School of Business Management. The system is being extended to other faculties from the current academic session.

2.5.3 What is the average time taken by the University for Declaration of examination results? In case of delay, what measures have been taken to address them? Indicate the mode / media adopted by the University for the Publication of examination results (e.g. website, SMS, email, etc.)

Average time taken for declaration of result is seven to ten days. Results are displayed on the University website and notice boards; spot evaluation ensuring timely declaration of results. In case of delay, the Controller of Examination ensures declaration before start of the new semester with timely intimation to all, though such an instance has not occurred so far.

2.5.4 How does the University ensure transparency in the evaluation process? What are the rigorous features introduced by the University to ensure confidentiality?

Marks obtained and answer sheets of 1st and 2nd term exams, quizzes, surprise tests and assessments are shown to students. Similarly, the answer sheet of the end-term exam is also shown before the declaration of result. If there is any doubt the student can apply for re-evaluation. The system followed for UG and PG programs is different.

UG programs. Three sets of question papers are set by external examiners, out of which one is selected randomly.

PG programs.

o Till 2014, three sets of question papers were prepared by internal examiners and provided to the Controller of Examination in a sealed envelope. Out of these, one set was selected randomly.

o Post 2014, a strong room having standalone computers were provided to the Controller of Examinations (COE), in which no memory devices are permitted. Three papers are set, out of which, one was selected by the COE. Print outs of the selected question paper are then printed in the same room.

2.5.5 Does the University have an integrated examination platform for the following processes?

Pre-examination processes – Time table generation, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc.

Common date sheet is notified for all Schools and the Senior. Superintendent, Superintendent, Deputy Superintendent for end-term examinations of each Faculty is appointed by the COE. Invigilation staff is deputed by the respective Deans. Flying squads are appointed for each exam center. Date wise attendance sheets of the students appearing in the examinations are also maintained.

Examination process–Examination material management, logistics, etc.

COE has a centralized 'Control Room' to keep sealed question papers, answer books and exam related material to maintain confidentiality. Examination halls are prepared in advance and seating plans are prominently displayed.

Post-examination process – Attendance capture, OMR based exam result, auto processing, generic result processing, certification, etc.

Answer books are dispatched by the school superintendent (Examination) to the COE on a day to day basis. These are processed for evaluation. The compilation of the result is examined by the concerned faculty Dean.

2.5.6 Has the University introduced any reforms in its Ph.D. evaluation process?

All UGC guidelines issued in 2009 for maintenance of minimum standard for M. Phil/ Ph.D. are being followed. Besides these guidelines, some initiatives/reforms taken are as follows:

- o Seminars are mandatory for each student.
- o Semester-wise assessment of research progress by faculty.
- o Pre-submission thesis presentation (open house) for scrutiny.
- o Thesis is checked for plagiarism before submission.
- o Evaluation of thesis by two experts, one from India and one from abroad, preferably from the USA, Europe or advanced countries.
- o Two peer reviewed publications in Thomson Reuters/Scopus listed journals is compulsory before thesis submission.
- o Submission of soft copy of Ph.D. thesis is mandatory for uploading in thesis repository of e-library of Shoolini University and Shodhganga - INFLIBNET Center which make it available to the entire scholarly community in open access.

2.5.7 Has the University created any provision for including the name of the college in the degree certificate?

Not Applicable

2.5.8 What is the mechanism for redressal of grievances with reference to examinations?

There is provision for checking and re-evaluation of the answer books or which are shown to students through the Dean of the concerned faculty.

2.5.9 What efforts have been made by the University to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved the process and functioning of the examination division/section.

To streamline operations of the COE, there is a control room which has reprographic facilities and standalone computers located in a strong room for setting up of question papers. In addition, online examinations are conducted. Currently, the practice has been adopted in Computer Science and Management Sciences.

2.6. Student Performance and Learning Outcomes

2.6.1 Has the University articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?

Graduate attributes cannot be generalized as they differ from School to School. Notwithstanding the University strives to produce 'future ready professionals' who are well rounded in terms of domain knowledge and are able to compete on a global play field.

The University has taken various initiatives to inculcate and enrich attributes through quality classroom teaching, interactions with industry and academic experts, participation in seminars, conferences, workshops, guidance to NET, GATE & GPAT aspirants etc. Courses like verbal and written communication skills and aptitude development have been incorporated in the curriculum.

Students are encouraged to showcase their talents through various clubs and motivated to be good citizens through NSS, yoga and Physical Training etc.

2.6.2 Does the University have clearly stated learning outcomes for its academic programs? If yes, give details on how the students and staff are made aware of these?

The objectives and learning outcomes of the academic programs are clearly stated before introduction of any new program. Details of programs with their learning outcomes are discussed in faculty meetings at the School level. Course allocation is also done in faculty meetings as per compatibility of course learning outcomes and specializations of the faculty members.

Each faculty brings out a program wise booklet of lecture schedules before the commencement of the semester, wherein the objectives and learning outcomes of each course are defined by the concerned course coordinator. These booklets are distributed to the students and posted on eUniv before the commencement of the classes.

2.6.3 How are the University's teaching, learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?

All lectures are structured to ensure the learning outcomes are attained. In terms of pedagogy, instruction is done through power point presentations, case study, group discussions, demonstration, videos, live industry examples, problem solving etc.

Lecture description and pedagogy is distributed beforehand to ensure achievement of learning outcomes. In addition, study material like power point presentations, videos, case studies etc. is made available to students on eUniv for reference/revision. Students' performance is evaluated from time to time through term exams, surprise tests, quizzes, assignments, practical, seminars, presentations, viva-voce etc.

2.6.4 How does the University collect and analyze data on student learning outcomes and use it to overcome the barriers to learning?

The learning outcomes are analyzed through both formal and informal interaction with students. Informal interaction is done in class rooms, during presentations, projects, internal assessments, etc.

Term examination results are shared with students along with feedback and evaluated answer books are shown. Such interactions helps the faculty to work out strategies to overcome barriers like identifying and counseling slow learners, providing special guidance to the advanced learners, etc.

2.6.5 What are the new technologies deployed by the University in enhancing student learning and evaluation and how does it seek to meet fresh/future challenges?

In its quest for excellence, Shoolini University leverages technology to meet global standards. The University has taken a number of initiatives to enhance student learning and evaluation. Some initiatives are enunciated:

1. The entire campus including hostels is Wi-Fi enabled facilitating online research and learning.
2. All lecture theaters of the University are equipped with audio visual facilities and lectures are mostly delivered using power point presentations for better understanding.
3. In addition to the above, teaching is supplemented by online talks and resources.
4. eUniv initiative has been adopted by Shoolini University, in which all teaching material (including video lectures) are provided to the students online on 24x7 basis so that they can clarify their doubts at any point of time.
5. Analytics lab is established in the Yogananda Knowledge Center.
6. Smart cards are provided to all University members for single point access to all resources.

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

The research philosophy of Shoolini University is focused on harnessing the Himalayan biodiversity, its conservation and sustainable management by employing cutting edge technologies in Basic Sciences, Biotechnology, Pharmaceutics, Engineering, and Management. The goal is to congregate industrial and societal needs. To meet the objectives, the University is working towards creating Centers of Excellence and inter-institutional collaborations (both national and international) for research and development. The University has several collaborations with research institutes, universities and industries in India and abroad. The University has been able to build a work culture which focuses on excellence in research and 210 Ph.D. students are registered currently.

The University is actively working towards providing consultancy services to the industry in its areas of expertise. Currently, consultancy projects for service, Pharmaceutical and Engineering industries are being provided by the University.

Shoolini University is also working towards its social responsibilities with the seriousness they deserve. The University has adopted the Panthi Village in Shimla District, H.P. for ecological conservation and has helped to create a secondary source of income for farmers in this wet temperate region. In addition, faculty members visit selected schools regularly to impart latest knowledge in the field of Science and Management under Knowledge Sharing Programs.

3.1   Promotion of Research

3.1.1   Does the University have a Research Committee to monitor and address issues related to research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.

Yes, the University has constituted a Joint Research and Development Advisory Committee (JRDAC) for monitoring and addressing research related issues; details of which are given below:

Composition: The JRDAC of the University is made up of external experts and University professors. The composition is as follows:

1. Chairman – Vice-Chancellor or an eminent scientist appointed by him.
2. Co-Chairman – Vice-Chancellor, in case the Chairman is appointed from outside the University.

3. Members:

      i. President, Foundation of Life Sciences and Business Management.

      ii. Registrar, All Deans and Heads of School (if in the rank of Professor).

      iii. All Professors

      iv. Five external Eminent Scientists/Engineers as appointed by the Vice-Chancellor.

      v. Vice-Chancellor may also nominate up to three faculty members other than Professors for one year as per the need.

4. Dean, Research and Development - Member Secretary.

Recommendations and Implementation and their Impact: The recommendations of JRDAC have helped in attaining the research goals and, in improving and smoothening the research projects in the University; specific examples are mentioned below:

1. To keep focus of the University research on specific areas selected by the University, it is focusing its research on Sustainable utilization of the Himalayan resources and thus, the projects are being aligned with the declared objectives extramural funding from various agencies has been received. The University has also been nominated as full member of International Center for Integrated Mountain Development (ICMOD). Research groups in the are working on several plants from the Himalayan region.

2. Extramural funding – the University has been sanctioned approximately Rs. 150,000,000/- (Rs 4 Crores of which is accepted in principle) in terms of research funding from various national funding agencies including DST, DBT, ICMR, DRDO, etc.

3. Guidance to students for appearing in NET/GATE/GPAT etc. exams to improve the quality of research students – the University has made this mandatory and has even included the syllabus for NET/GATE/GPAT exams in its curriculum.

4. Prepare a centralized record of submitted projects and publications in Dean, Research & Development's office – records have been created and are updated regularly.

5. Develop linkages with local industry for obtaining funds - the linkages with local industry have been developed. Currently, consultancy and research projects are being carried out for Meridian and Tirupati Medicare Ltd., HP Horticultural Produce Marketing and Processing Corporation etc. Formal MoUs have been signed.

6. Filing of patents – Shoolini University has initiated efforts for filing patents, for which an IP cell has been established and 12 patents have already been filed by various faculty members of the University.
7. Constitute Research Development Committees for each Faculty. – The recommendation has been implemented.

3.1.2 What is the policy of the University to promote research in its affiliated / constituent colleges?   Not Applicable

3.1.3 What are the proactive mechanisms adopted by the University to facilitate the smooth implementation of research schemes/projects?

Steps that have been initiated are enumerated below:

Advancing Funds for Sanctioned Projects: Many a time, there is a substantial delay in receipt of funds. Therefore, once the sanction letter from the funding agency has been received, advance funds are provided.

Providing Seed Money: At the time of its inception, research labs, instrumentation labs, workshops with basic infrastructure was set up in all Schools by the University to facilitate research. In addition, the University also provides seed money to faculty members to support research projects.

Simplification of procedures for sanctions/ purchases by investigators: The procedure for sanction/purchase by investigators is simplified in the University; details as given below:

o   For purchases below Rs. 5000/- Dean faculty.
o   For purchases up to Rs.10000/- Registrar.
o   For purchases up to Rs. 20000/- VC on request of PI.
o   For purchases above Rs. 20000/- Central purchase committee.

Autonomy to the principal investigator/coordinator for utilizing overhead charges: The Principal Investigator/Coordinator is given full autonomy for utilization of overhead charges.

Timely release of grants: Funds are transferred to the project head as soon as they are received from the funding agency.

Timely auditing: Audits are done regularly on time at the end of the financial year

Submission of utilization certificate to the funding authorities: The utilization certificate is submitted timely.

3.1.4 How is interdisciplinary research promoted?

Between/among different schools of the University:

University encourages multidisciplinary research and submission of joint proposals by different Schools. Therefore, it is highly recommended to include faculty members from different Schools in the Research Guiding Committees of the Ph.D. students. Several joint research proposals have been submitted by the scientists from Biotechnology, Pharmaceutical Sciences, Basic Sciences, and Engineering Faculties.

(Refer to School Reports for details)

Collaboration with national/ international institutes/ industries:

To encourage collaborative research, Shoolini University has signed MoUs with several national, international institutes and industries that include Universities and research and development institutes in China, South Korea, Kenya, Ukraine, UK etc. University is a member of the International Consortium on Himalayan Universities. The University also has MoUs and joint research projects with Indian Universities and Institutes in India.

(Refer to 3.7.3)

A project entitled 'Testing for the Efficacy of Functional Foods: Collaborative Development of an Assay to Determine Impacts of Foods on Antioxidant Activity' is currently running between Shoolini University and University of Otago, New Zealand.

The University is also carrying out projects in collaboration with industries.

3.1.5 Give details of workshops/ training programs/ sensitization programs conducted by the University to promote a research culture on campus.

The University has been conducting workshops, training and sensitization programs, as illustrated below, to promote research culture in the University. (Please refer to School's report for details)

- o National level programs funded by agencies like ICMR, DBT and DST have been conducted where researchers of national and international eminence have presented their work, thus providing an opportunity to young researchers to interact with them.
- o The University has conducted lab safety programs to educate young researchers about safe use of chemicals, biologicals, fire safety etc.
- o A compulsory course on research ethics is designed for PG students.

- Sensitization programs for the intellectual property rights and patent filling have also been organized from time to time by involving external faculty and agencies.
- Twenty One INSPIRE Science Internship Programs conducted from October, 2010 to December, 2014.
- Workshop on 'Optimization of Sampling Errors', from 2-3 December, 2013
- One Day Workshop on "Advancement in Analytical Techniques" in Association with Waters India Ltd. under "Catch Them Young program" March 25, 2015.
- Fluid Mechanics workshop conducted by IIT- Kharagpur, May, 2014 online.
- Computer Programming workshop conducted by IIT- Bombay, June, 2014 online.

3.1.6 How does the University facilitate researchers of eminence to visit the campus as adjunct professors? What is the impact of such efforts on the research activities of the University?

- The University encourages exchange of faculty and facilitates exposure of its students and faculty to eminent research in various disciplines by appointing Professors of Eminence, Adjunct faculty and Visiting Professors and arranging for visits and lectures of eminent scientists from industry and academia.
- Adjunct professors from industry and academia have ensured exchange of ideas and improvement in the research culture and in identifying the weakness and strengths of the researchers.
- At least one member from industry is appointed in Research & Development committees and Board of Studies of each Faculty.
- Exchange visits have been organized with academia and industry thus giving impetus to research activities.

(Please refer School reports for the list of visiting/adjunct professors)

3.1.7 What percentage of the total budget is earmarked for research? Give details of heads of expenditure, financial allocation and actual utilization.

Around 11% of the total University budget is allocated for research. Heads of expenditure include recurring (consumables, seminars/workshops, travel, salary and IT facilities) and non-recurring (infrastructure and laboratory equipment). The recurring and non-recurring shares stand at 60% and 40%, respectively of the total research budget which is approximately 2.75 crores (average of last four years). Actual utilization is almost 100% of financial allocation.

3.1.8 **In its budget, does the University earmark funds for promoting research in its affiliated colleges? If yes, provide details.** Not Applicable

3.1.9 **Does the University encourage research by awarding Post-Doctoral Fellowships/ Research Associateships? If yes, provide details like number of students registered, funding by the University and other sources.**

The University does not offer postdoctoral fellowships but has been encouraging research by awarding pre-doctoral fellowships and research associateships. Fellowships in the form of teaching assistantships have been provided to young researchers to encourage them to do doctoral research.

Twenty two such students have already completed their Ph.Ds (6 in faculty of Pharmaceutical Sciences, 5 in Biotechnology, 4 in Management, 4 in Engineering, and 4 in Basic Sciences) and 26 are currently pursuing their doctoral research.

The University provides 50% tuition fee waivers to the students who get national fellowships from various agencies like DST, ICMR, DBT, INSPIRE program etc.

3.1.10 **What percentage of faculty have utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the University monitor the output of these scholars?**

The University encourages exchange of faculty and joint research projects with premier institutions in India and abroad. The faculty is allowed to proceed on sabbatical leave of short or long duration to facilitate the research exchange. To exemplify, Dr. Adesh Saini visited University of Otago, New Zealand (Jan 2015), Mr. Gaurav Sharma (National Institute of Malaria Research, New Delhi (October 2014), Dr. Radhyeshyam Rai, University of Leeds (March 2014), Dr. Neeraj Gupta, Chinese Academic of Sciences, China (May 2014-May 2016), Dr. Anil Kumar, Kyungpook National University, South Korea, (12/2013 – 12/2015, Dr. Sanjay Kumar, KIT, Germany and INS Shanghai, China (2/2014-3/2016)

The progress of the output of these scholars is monitored through research reports, which such faculty has to submit every three months and on return from the sabbatical. The international exchange office of the University is also required to be informed about networking activities and research office.

3.1.11 Provide details of national and international conferences organized by the University highlighting the names of eminent scientists/scholars who participated in these events.

Several national conferences have been organized by the University. The representative list is provided below. (*For detailed list please refer to the School reports)*

Faculty of Basic Sciences:

o   National Workshop on 'Advances in Electron Microscopy & Allied Fields,' Sept., 2011.
o   Twenty One INSPIRE Science Internship Programs, from October, 2010 to December, 2014.
    Names of some of the eminent scientists who attended these programs are as follows:

    a.   Prof. R.K. Kohli, INSA, NAAS Fellow, Vice Chancellor (Designate) DAV University Jalandhar; Department of Botany, Panjab University, Chandigarh
    b.   Prof. I.S. Dua, Professor Plant Molecular Biology, Former Chairman, Department of Botany, Panjab University, Chandigarh
    c.   Late Prof. S.P. Vij, Prof. of Eminence (2009-2013), The Orchid Society of India (TOSI), Department of Botany, Punjab University, Chandigarh
    d.   Prof. S.K. Mehta, Department of Chemistry and Center of Advanced study in chemistry, Panjab University, Chandigarh
    e.   Prof. Pallab Ray, Department of Medical Microbiology, PGIMER, Chandigarh
    f.   Prof. Rajendra Prasad, Shanti Swarup Bhatnagar Award Winner, Jawaharlal Nehru University, Delhi
    g.   Prof. Anil Bhardwaj ,FNA, FASc Head, Planetary Sciences, Branch Space Physics Laboratory Vikarm Sarabhai Space Center Trivandrum- 695022
    h.   Prof. Avinash Khare, Raja Ramanna Fellow, Indian Institute of Science Education and Research, Pune
    i.   Prof. Mrs. Suman Bala Beri, Department of Physics, Panjab University Chandigarh.
    j.   Prof. RC Sobti, Ex-Vice Chancellor, Panjab University, Chandigarh.

Faculty of Applied Sciences and Biotechnology

- o DBT sponsored training cum seminar on 'Molecular Biology techniques' for college lecturers, November 10-19, 2011.
- o Awareness program for farmers on 'Protection of Plant Varieties and Farmers Rights,' sponsored by PPV&FRA, Ministry of Agriculture, February 19, 2013.
- o Sensitization program in collaboration with Ennoble IP to provide awareness about IPR and encourage creativity among the faculty and students.

  Names of some of the eminent scientists who attended these programs are as follows:

  a. Prof. Arvind Kumar Bhatt, Department of Biotechnology, H. P. University, Shimla.
  b. Prof. S P Vij, Professor Emeritus & NASI, Senior Scientist, Panjab University, Chandigarh.
  c. Prof. S.C. Verma, Botany Department, Panjab University, Chandigarh.
  d. Prof. David Bergeron, Oliver Wyman, USA.
  e. Dr. Duni Chand, Department of Biotechnology, H. P. University, Shimla.
  f. Dr. T. Bind, BD Biosciences, New Delhi.
  g. Prof. H.S. Dhaliwal Vice Chancellor, Eternal University, Baru Sahib, H.P
  h. Prof. S.K. Sharma Former Vice Chancellor, CSK, HPKV, Palampur, H.P
  i. Dr. Manoj Kumar Kashyap, Moores Cancer Center, University of California, USA
  j. Dr. Rama Mohan Rao, Monsanto India Ltd
  k. Prof. H.V. Batra, Director, Defense Food research Laboratory, Mysore
  l. Prof. Sonal Malhotra, Addis Ababa Institute of Technology, Ethopia
  m. Prof. Kulwant Rai, University of Horticulture & Forestry, Solan.

Faculty of Management Sciences and Liberal Arts:

- o Workshop on 'Finance and Accounting', from 24-25 February, 2014.
- o Workshop on 'Optimization of Sampling Errors', from 2-3 December, 2013.

- o Workshop on "SPSS", from 7-8 June, 2013.
- o Workshop on "Research Methodology", from 15-16 February, 2013.
- o Workshop on "Basics of Research", 11 September, 2012.

Names of some of the eminent scientists who attended these programs are as follows:

- a. Prof. Kulvinder Singh, Department of Education, Punjabi University Patiala
- b. Prof. Subhash Davar, Dean Faculty of Commerce, Kurukshetra University
- c. Prof. Narender Singh, Faculty of Commerce, Kurukshetra University
- d. Prof. S.S. Narta, Department of Management, Himachal Pradesh University, Shimla
- e. Prof. Piar Chand Ryhal, Department of Humanities and Social Sciences, National Institute of Technology, Hamirpur
- f. Dr. Arunesh Garg, Gyan Jyoti Insititute of Management, Mohali.

Faculty of Pharmaceutical Sciences:

- o National Conference, Drug Discovery, 'Development & Clinical trials: Current status and the way forward,' June 26-27, 2010.
- o National Seminar, Importance of 'Cell Lines in Pharmaceutical Research in India,' DST & Shoolini University Sponsored, November 14-15, 2011.
- o An Interface on 'Pharmaceutical Research, Education & Industrial Confluence -Bridging the skill Gap' organized by School of Pharmaceutical Sciences, March, 2012.
- o 'Research Trends in Future Drug Development: Exploration of Medicinal and Aromatic Flora,' ICMR & SPER Sponsored, June, 20-21, 2013.

Names of some of the eminent scientists who attended these programs are as follows:
1. Prof. VK Kapoor, Former Chairperson Panjab University, Chandigarh
2. Dr. SS Handa, Ex-Director, IIIM, Jammu
3. Dr. KK Bhutani, Director, NIPER, Mohali
4. Dr. CK Katiyar, Head, Dabur Research Foundation, Ghaziabad.
5. Dr. Neeraj Tandon, Head, Medicinal Plants Division, ICMR, New Delhi

6. Prof. PL Sharma, Former Dean and Professor of Eminence, PGI, Chandigarh
7. Prof AK Chakarborty, NIPER,Mohali

Faculty of Engineering and Technology:

o 'Engineering Thermodynamics' in Association with IIT-Bombay, December 11-21, 2012.
o 'Database Management System' in Association with IIT-Bombay, May 21-31, 2013.
o 'Analog Electronics' in Association with IIT-Kharagpur, June 03-13, 2013.
o 'Fluid Mechanics' in Association with IIT- Kharagpur, May 20-30, 2014.
o 'Computer Programming' in Association with IIT- Bombay, June 02-13, 2014.
o 'Computer Networking' in Association with IIT- Bombay, June 16-21, 2014.
o 'Cyber Security' in Association with IIT- Bombay, July 10-20, 2014.

3.2   Resource Mobilization for Research

3.2.1   What are the financial provisions made in the University budget for supporting students' research projects?

Shoolini University has provisioned 3% of total budget for supporting students' research.

3.2.2   Has the University taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?

Yes. Shoolini University has taken special initiative to promote and encourage faculty members to file patents. Shoolini Intellectual Property Right Cell (SIPRC) was created in 2014 in collaboration with Ennoble IP, Noida. The SIPRC has its own dedicated team consisting of legal advisor, Company secretary and faculty member trained in IPR. Shoolini University and Ennoble IP signed a Memorandum of Understanding (MoU) on 13 June 2014, with an idea to draft IP policies for Shoolini University and provide awareness about the IP issues to the faculty members of Shoolini University.

Four special IP awareness sessions were organized by the Ennoble IP to sensitize and encourage creativity among the faculty and students. To

further strengthen the patenting process, the University has joined hands with Corporate Consultants, Mohali and has filled 12 patents.

Table 3.1 List of Patents

S.No.	Title of the patent	Inventors	Patent filing no
1	Compound for enhancing activity of antibiotic compositions and overcoming drug resistance.	Dr. Umar Farooq *et al.*	1229/DEL/2015
2	Novel peptide sequence for developing diagnostic agents for malaria detection.	Dr. Umar Farooq *et al.*	1228/DEL/2015
3	Terpenoids from *Colebrookea oppositifolia* as activity enhancers of antibiotic compositions and extraction method thereof.	Dr. Kamal Dev *et al.*	1326/DEL/2015
4	Compounds for enhancing activity of antibiotic compositions against drug sensitive and drug resistant bacteria.	Dr. Kamal Dev *et al.*	1429/DEL/2015
5	Phytocompounds from *vitex nigundo* for enhancing antibiotic activity and overcoming drug resistance	Dr. Kamal Dev *et al.*	1464/2015-DEL
6	Novel peptide sequences for developing anti-malaria vaccines and therapeutic compounds	Dr. Umar Farooq *et al.*	1465/DEL/2015
7	Nanocomposite for removal of dye based water pollutants	Dr. Deepak Pathania *et al.*	1537/DEL/2015
8	Novel nano graphene based composite for water treatment application and method of synthesis thereof	Dr. Pardeep Singh *et al.*	1819/DEL/2015
9	Chitosan G polyacrylamide/copper nanocomposites for controlled drug delivery	Dr. Deepak Pathania *et al.*	1875/DEL/2015
10	Nanocomposites for antimicrobial treatment of drinking water	Dr. Deepak Pathania *et al.*	1897/DEL/2015
11	A novel microbe producing extracellular beta-galactosidase and method of enzymes production thereof	Dr. Kamal Dev *et al.*	1895/DEL/2015
12	Novel m/o for producing xylanase and method of enzyme production thereof	Dr. Amit Seth *et al.*	1846/DEL/2015

3.2.3 Provide the following details of ongoing research projects of faculty:

Details are tabulated below:

Table 3.2 List of ongoing projects

PI/PIs	Project Title	Funding agency	Amount (Rs.)	Duration
Dr. A. Thakur	Nano magneto-dielectric materials for high frequency applications	DAE	2,400,000.00	2012-2015
Dr. A. K Saini	Identification of genes conferring beneficial biofertilizer and biocontrol activities in plant-growth-promoting rhizobacteria (PGPR) for crop improvement	DST	2,340,000.00	2/2014-2/2016
Dr. A. K Saini	Testing for the Efficacy of Functional Foods: Collaborative Development of an Assay to Determine Impacts of Foods on Antioxidant Activity	Indo NZ project by DST-MBIE	6,480,000.00	2/2013-2/2016
Dr. A. Seth	Isolation, Optimization and cloning of nitrilase of thermophilic isolate from hot springs of Himachal Pradesh and its application in mandelic acid synthesis (SB/YS/LS-19/2013)	DST	1,800,000.00	8/2013-8/2016
Dr. A. Sourirajan Co-PI: Dr. K. Dev	Identification and Characterization of Medicinal Plants of North-West Himalayas with Synergistic Effects on Traditional Antibiotics to Control Clinical Bacterial Infections.	SERB/DST	2,270,000.00	7/2012-7/2015
Dr. A. Tripathi (PI), Dr S. Kulshrestha (Co-PI)	Isolation and identification of bioactive compounds from wild mushrooms for new drug discovery	DBT	1,600,000.00	2014-2017

PI/PIs	Project Title	Funding agency	Amount (Rs.)	Duration
Dr. D. Kumar (PI) & Dr. S. Sharma	Infrastructure development for B.Tech. Food Technology under HRD scheme	MoFPI	7,500,000.00	2015-
Dr. D. Kumar (PI) & Dr. S. Sharma	Process optimization for recovery and purification of Zein and xanthophyll's (resp. valuable maize proteins and pigments) and its stability application in food products Ref. No. BT/PR5884/FNS/20/680/2012	DBT	1,620,000.00	10/2013-10-2016
Dr. K. Chauhan	Chitosan-thiomer, sulphide and sulphonium salt particulates in arsenic Detoxification	BRNS	2,321,000.00	3/2014-3/2017
Dr. P. Singh	Photocatalytic activity of ternary metal oxide for water purification	DST	2,500,000.00	12/2014-12/2017
Dr. P. Thakur	Synthesis and characterization of nano-ferrities for the development of radar absorbing materials	DST	2,200,000.00	4/2014-4/2017
Dr. R. Kumar, Dr A. Pandey, Er V. P. Singh	Solar steam cooking for 500 persons at Shoolini University Girls Hostel	MNRE	3,800,000.00	2014-2015
Dr. R. Saini (PI) & Dr. Neeraj Mahindroo (CO-PI)	Evaluation of withanolide lactones as immunomodulators to induce granulysin expression in immune cells conferring cytotoxicity towards cancerous cells	DBT	2,500,000.00	Approved
Dr. R. Goyal	Isolation & Characterization of bioactive leads from	DST-Fast Track	2,130,000.00	8/2013-7/2016

PI/PIs	Project Title	Funding agency	Amount (Rs.)	Duration
	Pinus for prevention of osteoporotic syndrome			
Dr. S. Kulshrestha	Identification and characterization of hypovirulence factors from Rosellinia nectarix causing white root rot in apple.	DBT	2,870,000.00	6/2014-6/2017
Dr. S. Sharma (PI) & Dr. P. Chauhan (Co-PI)	Utilization of Wild Himalayan Fig for the sustainable livelihood of weaker sections of the society in mid hill region of Himachal Pradesh.	DST	1,855,060.00	7/2014-7/2017
Dr. S. Dutt	"Search for physics beyond standard model at hadron colliders using DZERO and compact muon solenoid (CMS) detectors."	DST	2,300,000.00	2015-2018
Dr. U. Farooq	Role of Th17 and Treg Cells in Pathogenicity and immunity of P. falciparum infection	ICMR	8,000,000.00	Approved
Dr. A. Tripathi	Cultivation of wild edible mushrooms with functional properties of performance enhance	LSRB-DRDO	2,000,000.00	Approved

3.2.4 **Does the University have any projects sponsored by the industry/ corporate houses? If yes, give details such as the name of the project, funding agency and grants received.**

Yes, the University has projects sponsored by industry/corporate houses; details tabulated:

Table 3.3 List of sponsored projects

Name of Project	Funding Agency	Grants Received (Rs.)
Development of Nano formulation of Vitamin D3	Tirupati Medicare Ltd., Paonta Shaib, HP	30000/-
Development of Herbal Formulation for Diabetes	Tirupati Medicare Ltd., Paonta Shaib, HP	30000/-
Formulation development for vitamin preparations	Meridian Medicare Ltd., Solan, H.P.	Under evaluation
Development of Food Products	HPMC	200,000/- pa
AKASH	IIT Mumbai	2,50,000/-

3.2.5 **How many departments of the University have been recognized for their research activities by national / international agencies (UGC-SAP, CAS; Department with Potential for Excellence; DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition.**

Shoolini University has been awarded a Center of Excellence for B. Tech. and M. Tech teaching program in Food Technology by MoFPI (Ministry of Food Processing Industries, Govt. of India) with a grant of □73.71 Lakh. A food testing lab has been approved in principal by MoFPI at cost of approximately Rs.3 crores.

3.2.6 **List details of:**
a. research projects completed and grants received during the last four years (funded by National/International agencies).
Details are tabulated:

Table 3.4 List of projects completed

Year	PIs	Name of the Project	Funding Agency	Grant Received
2012-14	Dr. A. Thakur (PI), Dr. P. Thakur (CO-PI)	Fabrication and characterization of substrate for patch antenna by using nano magneto-dielectric materials for the missile applications.	DRDO	1,000,000.00
2012-15	Dr. S. Kulshrestha	Identification of genes involved in pathogenesis of *Rosellinia necatrix* causing white root rot on apple	DST	2,300,000.00
2012-15	Dr. U. Farooq	Prevalence and Characterization of *Echinococcus granulosus* strains isolated in Himachal Pradesh	ICMR	3,500,000.00
2011-15	Dr. A. Sourirajan	Identification of substrates for S. cerevisiae Polo- like kinase (PLK), Cdc5 during meiotic cell division.	DBT	4,547,000.00

b. **Inter-institutional collaborative projects and grants received:**

i) **All India collaboration**

Table 3.5 List of collaborative projects

PIs	Collaborator	Name of the Project	Name of Funding Agency	Total Grant Received
Dr. U. Farooq,	Dr. R. Sehgal, M.D. Professor,PGIMER, Chandigarh. Dr. J. Mahanta, MD, Director, (ICMR) Dibrugarh, Assam.	Role of Th17 and *Treg* Cells in Pathogenicity and immunity of *P. falciparum* infection	ICMR	8,000,000.00 (Approved)
Dr. R. Goyal,	Dr. A.K. Chakraborty, NIPER, Mohali	Anti-inflammatory activity of some novel synthetic compounds	-	Each Collaborator is sharing costs
Dr. N. Mahindroo,	Dr. U. Banu, JUIT, Waknaghat, Solan H.P	Small molecule modulators of Hedgehog-Gli pathway	-	Each Collaborator is sharing costs
Dr. N. Mahindroo, Dr. U. Farooq,	Dr. R. Sehgal, Head Department of Parasitology, PGIMER, Chandigarh	Investigation of North-Western Himalayan plants for anti-malarial activity	-	Each Collaborator is sharing costs
Ms. S. Khah,	Prof. K. Tikoo, Professor, In- charge, Pharmacology and Toxicology	Investigation of bioactive leads for prevention of bronchial asthmatic syndrome	-	Each Collaborator is sharing costs

PIs	Collaborator	Name of the Project	Name of Funding Agency	Total Grant Received
Dr. R. Rai	Dr. S. Sharma Associate Professor in Physics, A.N. College, Magadh University, Patna-800013	Hydrothermal Growth of Multicomponent Barium Titanate based Ferroelectric Oxides for multilayer Capacitors	-	Each Collaborator is bearing the cost of their part
Dr. S. Dutt	Prof. Satyaki Bhattachraya Saha Institute of Nuclear Physics, Kolkatta	India Search for Physics beyond Standard Model using trilepton final states.	-	Each Collaborator is bearing the cost of their part
Dr. S. Dutt	Prof. Suman Bala Beri Panjab University Chandigarh	Search for India Search for Physics beyond Standard Model NMSSM GUTs at 13 TeV.	-	Each Collaborator is bearing the cost of their part

Table 3.6 List of International Projects

PIs	Collaborator	Name of the Project	Name of Funding Agency	Total Grant Received
Dr. A. K Saini, School of Biotechnology	Prof. Christine Winterbourn Department of Pathology, University of Otago Christchurch, Christchurch, New Zealand	Testing for the Efficacy of Functional Foods: Collaborative Development of an Assay to Determine Impacts of Foods on Antioxidant Activity	DST-MBIE	6,480,000.00

PIs	Collaborator	Name of the Project	Name of Funding Agency	Total Grant Received
Dr. N. Mahindroo, School of Pharmaceutical Sciences	Dr. Jih-Hwa Guh, School of Pharmacy National Taiwan University Taipei, Taiwan	Small molecule modulators of Hedgehog-Gli pathway	GITA	Under Evaluation
Dr. D. Pathania, School of Chemistry	Prof Ajay Kumar Mishra, College of Engineering, Science and Technology, University of South Africa, Florida Science Campus, Johannesburg	Nanotechnology and Water Sustainability		Each Collaborative is bearing the cost of their part
Dr. D. Pathania, School of Chemistry	Prof Z.M. Siddiqi Department of Basic Sciences, Jubail University College, Jubail University Saudi Arabia	Nanotechnology and Water Sustainability		Each Collaborative is bearing the cost of their part
Dr. A. Thakur	Prof. J.H. Hsu	Nanomaterials Preparation and Characterization	-	Each Collaborative is bearing the cost of their part
Dr. R. Rai	Dr. S. J. Milne Leeds University, UK	Hydrothermal Growth of Multicomponent Barium Titanate based Ferroelectric Oxides for multilayer Capacitors	-	Each Collaborative is bearing the cost of their part

PIs	Collaborator	Name of the Project	Name of Funding Agency	Total Grant Received
Dr. S. Dutt	Prof. Harrison B. Prosper, Florida State University, USA	Search for contact interactions using inclusive Jet Pt Spectrum at 13 TeV	-	Each Collaborative is bearing the cost of their part
Dr. S. Dutt	Prof. Sunanada Banarjee, Fermi National Accelerator Laboratory, USA	Test Beam Studies at Hadron Calorimeters	-	Each Collaborative is bearing the cost of their part

3.3 Research Facilities

3.3.1 What efforts have been made by the University to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researchers in emerging disciplines?

The University has been progressively working to improve the infrastructure to facilitate research which is apparent from the facilities developed in a span of five years; details given below:

- o University has created specialized labs for all funded projects and has created infrastructure to facilitate research and improve output.
- o Created facilities for animal tissue culture and plant tissue culture.
- o Two Central Instrumentation Labs provide analytical and spectroscopic services.
- o A Food Testing Laboratory is currently under construction.
- o Research Centers in Nanotechnology, Automobile Engineering, Business Analytics Center have been created in the University.
- o University has a CPSCEA approved animal house.

The needs of the researchers in emerging disciplines are being met by creating facilities through research grants and by undertaking joint research projects with institutes and industries who have such facilities.

3.3.2 Does the University have an Information Resource Center to cater to the needs of researchers? If yes, provide details of the facility.

Yes, the University has a Knowledge Center which caters to the needs of the researchers. The details are given in criteria 4.2

3.3.3 **Does the University have a University Science Instrumentation Center (USIC)? If yes, have the facilities been made available to research scholars? What is the funding allotted to USIC?**

Yes, the University has two Central Instrumentation Facilities. The facilities are available to research scholars of the University. The University keeps adding on instruments to this facility. A separate budget of Rs. 25 lakhs is allotted to this facility.

3.3.4 **Does the University provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/ international)?** Yes

3.3.5 **Does the University have a specialized research center/ workstation on-campus and off-campus to address the special challenges of research programs?**

The University has specialized research centers as follows:

- o Research Center in Nanotechnology
- o Research Center in Omics
- o Research Center in Renewable Energy
- o Research Center in Yoga
- o Research Center in Automobile Engineering.
  - Center on Skills Progression Through Rapid Intensive iNnovative Training (SPRINT).
  - Food Testing laboratory.
  - Cell for Defense Research by Engineering Watch.

3.3.6 **Does the University have centers of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.**

Though the University is only five years old, it has been able to establish Research Centers in Nanotechnology, Biomics and Automobile Engineering. Shoolini University is the first private University in India to be the part of CMS (Compact Muon Solenoid) collaboration at CERN (European Organization for Nuclear Research). CMS is one of the Detector Machine around world's largest machine (LHC) having collaborators from 21 countries. Currently, the collaboration with Saha Institute of Nuclear Physics (SINP), Kolkata and Florida State University (FSU), USA are active. The centers at Shoolini University provide facilities to students and researchers from other Universities for training and research purposes.

3.4   Research Publications and Awards

3.4.1   Does the University publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.

The University publishes International Journal of Mathematica (ISSN – 2348-831X; online ISSN – 2393-9346), which is a peer reviewed journal. It is published in one volume per year consisting of two issues. The articles that address original research and reviews of both theoretical and experimental aspects are accepted for publication. The editorial board comprises of researchers from India and abroad.

3.4.2   Give details of publications by the faculty:

Number of papers published in peer reviewed journals:

(national/ international):

The University's faculty has published more than 500 papers in peer reviewed journals, refer to evaluative report of individual schools. Some of these articles are published in very high impact journals such as Genes & Development (IF: 13), RNA (IF: 8), Nucleic Acid Research (IF: 9), Natural Product Reports (IF: 11), ACS Medicinal Chemistry Letters etc.

Monographs: NIL

Chapters in Books: Details are given below:

- o **Bhalla, T.C. and Kumar, D (2000).** Application of enzymes in food processing. **In: Food Processing: Biotechnological applications.** Marwah, S.S. and Arora, J.K. Asia tech Publishers Inc. New Delhi. **ISBN: 81-87680-04-0.**
- o Bhatt, Anju, Bhushan Shashi and **Sharma Somesh** (2000). Preserves, Candies, Crystallized Fruits and Vegetables. In: **Postharvest Technology of Fruits andVegetables**.Verma, L.R. and Joshi, V.K (Eds).(2000) Vol 2pp720**.** The Indus Publ,. New Delhi **ISBN No: 81-7387-108-6.**
- o Joshi, V.K., **Sharma Somesh**, Bhushan Shashi and Attri, Devender (2004). Fruit-Based alcoholic beverages. In: Concise Encyclopedia of Bioresource Technology. Pandey, Ashok (Ed) Haworth Inc Press, New York.pp.335-345 **ISBN No:** ISBN 1-56022-980-2**.**
- o Joshi, V.K. and Sharma, S.(2008). Cider Vinegar. In: Vinegars. Paolo Giudici and Lisa Solieri (Eds), Italy **ISBN No:** 978-88-470-0865-6**.**

- Joshi. V.K., **Sharma Somesh** and Parmar M (2011). Cider and Perry. **In: Hand Book of Enology Principles, Practices and Recent Innovations.** Joshi V.K (Editor) Asia Tech Publ. Co., New Delhi.pp. 1116-1147 **ISBN No: 8187680245.**
- Bhushan. S and **Sharma Somesh** (2011). The maturation of wines and Brandies. **In: Hand Book of Enology Principles, Practices and Recent Inovations.** Joshi V.K (Editor) Asia Tech Publ. Co., New Delhi Vol II pp.861-900. **ISBN No: 8187680245.**
- Joshi V K, **Sharma Somesh** and Rana VS. (2011). Wine and Brandy. In: Food Biotechnology: Principles and Practices. Joshi, V.K. and Singh, R.S.(Eds). IK International Publishing House, Pvt Ltd. New Delhi. Pp 471-494. **ISBNNo: 9381141495**
- **Sharma Somesh**, Joshi V K and Thakur NS. (2011). Lactic acid fermented foods. In: Food Biotechnology: Principles and Practices. Joshi, V.K. and Singh, R.S.(Eds). IK International Publishing House, Pvt Ltd. New Delhi. Pp 375-415. **ISBNNo: 9381141495.**
- Sharma, S.K., Joshi V K and **Sharma Somesh** (2011). Probiotics: Concepts and applications in food. In: Food Biotechnology: Principles and Practices. Joshi, V.K. and Singh, R.S.(Eds). IK International Publishing House, Pvt Ltd. New Delhi. Pp 781-798. **ISBNNo: 9381141495**

Books edited

Prof. PK Khosla

- Khosla PK(1996) Eco-friendly Trees For Urban Beautification (Ed) ISTS, Solan 329+69pp
- Bawa R, Khosla PK and Kohli RK (1995) Forestry Improvement (Ed) Bishan Singh Mahinder Pal Singh parkashan, 23 A, New Cnaught Place Dehradun 307 pp
- Khurana DK and Khosla PK (1993) Agroforestry for Rural Needs Vol II (Ed) ISTS Solan 436 pp
- Khosla PK(1992) Status of Indian Forestry : Problems and perspectives ISTS, Solan 440 pp
- Bentley WR, Khosla PK and Karen Seckler (1992) Agroforestry : Problems and Applied Research Perspectives for India IBH Oxford 356 pp
- Puri S and Khosla PK (1992) Nursery Practices for Arid and Semi arid Zones. Winrock International Washington 310 pp
- Khosla PK and Kohli RK (1988) Social Forestry for Rural Development (Ed) ISTS, Solan 282pp

- Khosla PK, Khurana DK and Atul (1988) Production and Conservation Forestry (Ed) ISTS, Solan 226pp
- Khosla PK and Sehgal RN (1988) Trends in Tree Sciences (Ed) ISTS, Solan 350pp
- Khosla PK, Khurana DK (1987) Agroforestry for Rural Needs Vol I (Ed) ISTS, Solan 363 pp
- Khosla PK, Puri S and Khurana DK (1987) Agroforestry systems A New Challenge (Ed) ISTS, Solan 286 pp
- Khosla PK (1982) Improvement of Forest Biomass (Ed) ISTS, Solan 472 pp
- Khosla PK (1980) Advances in Forest Genetics (Ed) ISTS, Solan 375 pp

Books with ISBN and details of publishers:

- Dinesh Kumar (2012) Instumental Methods of Analysis in Biotechnology, Publisher- I K International Pvt. Ltd. Delhi (ISBN-13-9789381141380)
- Khushmeet Kumar (2012) Travelling Salesman Problem(TSP) A comparative Analysis(2012) Lambert Academic Publisher Thailand(ISBN-978-3-659-22670-0)
- Thakur, A. and Datt, R. (2012) Organizational Climate of self – financing Engineering Colleges, Lambert Publishing ISBN: 978-3-8484-3127-4.
- Gaurav Gupta and Deepika Gupta (2011), Software Engineering, Eagle Prakashan, Jalandhar. ISBN No. 978-3-8433-1013-0
- Gaurav Gupta and Deepika Gupta (2012), Personal Computer Organization, Eagle Prakashan, Jalandhar ISBN No. 978-93-82369-24-0
- Gaurav Gupta and Deepika Gupta (2013), Computer Peripheral & Interfacing, Eagle Prakashan, Jalandhar. ISBN No. 978-93-82369-23-3
- Gaurav Gupta and Deepika Goel (2014) Operating System, Eagle Prakashan, Jalandhar ISBN No. 978-93-83412-24-2
- Gaurav Gupta and Deepika Goel (2014), Data Communication & Networks, Eagle Prakashan, Jalandhar. ISBN No.978-93-83412-23-5
- Gaurav Gupta and Deepika Gupta (2014) Computer Architecture Revised, Eagle Prakashan, Jalandhar. ISBN No. 978-93-82369-28-8

- Gaurav Gupta and Deepika Gupta (2015) Computer Graphics Revised, Eagle Prakashan, Jalandhar. ISBN No. 978-93-83412-32-7.
- Pankaj Chuhan (2012). Harmful Effects of Cigarette Smoking & Alcohol Consumption- A Clinical Study. LAP LAMBERT Academic Publishing, **Germany, ISBN No.** 978-3-459-14642-8.

Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): 228

Citation Index – range / average: 0 – 50/3

SNIP -

SJR -

Impact Factor – range / average: 0-13/ 1.25

h-index: 14

3.4.3 **Give details of**

Faculty serving on the editorial boards of national and international journals:

- **Prof. O P Monga.**
  - Editorial Advisory Board Member of International Journal of Emerging Business Issues. of the National Foundation for Entrepreneurship Development (NFED), India
  - Honorary Member and member Advisory Board of Society--- Kalp Foundation: Knowledge Entrepreneurs, Shimla
  - Editorial Board Member---- Journal Club for Management Studies : An International Peer Reviewed Journal
  - International Journal of Emerging Business Issues (IJEBI) at Sri Venkateswara Institute of Information Technology & Management (SVIITM), Coimbatore, Tamil Nadu
  - Editorial Board Member- International Association of Scientific Innovation and Research, USA.
  - Honoray International Editorial Advisory Board Member, Journal of Entrepreneurship and Small & Medium Enterprises (IJESMES) Lazimpat, Kathmandu, Nepal

- **Dr. Umar Farooq**, Member of Editorial board (Journal of Pharmaceutical Sciences and Allied Research)

- o **Dr. Umar Farooq**, Member of Advisory Committee (Universities Journal of Phytochemistry and Ayurvedic Heights)
- o **Dr. Amit Kumar,** Editorial board member, International Association of Scientific Innovation and Research, Georgia, United States.
- o **Dr. Deepak Pathania**, Served as Editor in chief of International Journal of Theoretical and Applied Sciences, ISSN No.: 0975-1718, Published by Satya Prakashan, New Delhi from 2008-2012.
- o **Dr. Somesh Sharma,** International Journal of food Fermentation Technology, New Delhi Publishers.
- o **Dr. Pankaj Kumar Chauhan.**
    - Associate Editor, Scientific India Magazine
    - Editor, Indian Journal of Pharmaceutical and Biological Research
    - Editor, International Journal of Pharmaceutical and Medicinal Research

- o **Dr. Sunil Puri**, Editorial board member of Agroforestry Systems being published by Springer from 2001 to 2014
- o **Brig**. **Amar Cheema**, Consultant Editor, Indian Defense Review
- o **Dr. Gaurav Sharma**, Editorial board member, Universal Journal of Chemistry, Horizon Research Publishing, USA
- o **Dr. Dinesh Kumar** is the editorial member of the following Journals: American Journal of Food Science and Nutrition; Journal on New Biological Reports; Biological Forum – An International Journal; Indian Journal of Fundamental and Applied Sciences; International Journal of Food Agriculture and Veterinary Sciences
- o **Dr. Kamal Dev**. Member of Editorial Board, Universal Journal of Microbiology research.
- o **Dr. Radheshyam Rai** is an Associate Editor of International Journal "Chemistry Lab".

Faculty serving as members of steering committees of international conferences recognized by reputed organizations / societies:

- o **Dr. PK Khosla,** member steering committee INFOSYS
- o **Dr. Deepak Pathania.** President, Him Science Congress Association, Himachal Pradesh

3.4.4 Provide details of:

Research awards received by the faculty and students

Details of research awards are given below:

- **Dr. Saurabh Kulshrestha** was awarded with DBT-CREST award for year 2012.
- First Prize on Research paper, entitled Screening of medicinal plants for antityphoidal activity against multidrug resistance Salmonella typhi", by "Neha, S Chauhan, Y Sharma, S Tagore, A Alam and U Farooq, in 2014.
- Mr. Vikas Sharma, 3rd prize in poster presentation, AICTE sponsored National seminar on Future trends in Upcoming Parma Sector at Himalyan Institute of Pharmacy, Kala Amb, HP, March 2012.Mr. Gaurav Sharma, travel award from CSIR to attend 14th Tetrahedron Symposium, Vienna, Austria 2013
- Ms. Shaila Khah, Best Paper Award IPGA sponsored National Seminar on, "Role of community pharmacist in handling of antibiotics", Kurukshetra 2014
- Ms. Megha Sharma, INSPIRE Fellowship, 2012
- Ms. Kamna Sharma, INSPIRE Fellowship, 2013
- Mr. Sunil Kumar Tomar, INSPIRE Fellowship, 2013
- Mr. Sunil Tomar, Travel award from CSIR to attend 14th Tetrahedron Symposium, Vienna, Austria, 2013
- Mr. Varun Gupta, 1st prize in oral presentation 45th Annual Conference of Indian Pharmacological Society on Navigating Pharmacology towards Safe and effective Therapy organized by KB College of Pharmacy, Nagpur, Jan 2013.
- Mr. Varun Gupta, Best oral presenter award North Zone Conference of Indian Pharmacological Society on New Horizons in Pharmacy organized at GLA University, Mathura, Feb 2014
- Ms. Geetanjali Jain, 1st prize for poster presentation, International Conference on Drug Resistance, Development, Pharmaceutical Technology And Outcomes at Chitkara University, Punjab, April 2014
- Mr. Sunil Tomar, Travel award from ICMR New Delhi to attend Dubai International Pharmaceutical Technologies, Conference & Exhibition DUPHAT-2014, Dubai, UAE 2014
- Ms.Violina Kakoty, 2nd prize for poster presentation at International Conference on Molecular Pharmacology, Drug Discovery and Nano Pharmaceuticals - 2015 at Chitkara University, Punjab, March 2015

- Dr. Deepak Pathania, Best paper Awarded in National Workshop Cum Seminar on Advances in Electron Microscopy & Allied Fields, Sept., 2011, Shoolini University, Solan
- Dr Amit Kumar, Travel Award from DST to attend 2nd International Conference on Structural Nano Composites (NANOSTRUC 2014), Madrid Spain, 20-21 May 2014
- Dr Amit Seth, Certificate of Merit at National Conference on Modern Approaches to Pteridophytes: Biology, Biodiversity and Bioresource held at CSIR-Institute of Himalayan Bioresource Technology, Palampur, 20-21 December, 2014.
- Dr Anuradha Sourajan, DBT-BIOCARE for women scientists, 2011
- Dr Astha Tripathi, DBT-BIOCARE for women scientists, 2013
- Ms. Nitika Thakur, received first prize in oral session titled "Technological intervention through different systems of cultivation presented at National Conference on Recent Developments in Science and Technology (ISRS); 2014 Oct 10-12; Department of Biotechnology, HPU Shimla, Himachal Pradesh.
- Ms. Himika Gupta received Dr. Anji Reddy Award (2011) by Physiological Society of India Annual Conference, NRI Medical College and General Hospital, AP.
- Ali R, Farooq S, Farooq U received Best Poster Award in "National Seminar On Bio-Degradation and Bioremediation -A Novel Remedy for pollution Abatement" Saturday,18th February 2012.
- Ms. Varsha Rani, INSPIRE research fellowship, 2010
- Ms. Tanvi Gupta, INSPIRE research fellowship, 2014
- Ms. Neha Chauhan, INSPIRE research fellowship, 2014
- Ms. Nazam Khan, Maulana Azad National Fellowship, 2011
- Mr. Jitender Kumar, Rajiv Gandhi National Fellowship, 2010
- Ms. Bharti, Rajiv Gandhi National Fellowship, 2012
- Ms. Poonam, Rajiv Gandhi National Fellowship 2011
- Ms Parul Sharma, Best Poster award in Second National conference on Multifunctional Advanced Materials, Shoolini University, Solan, H.P. June 11-13, 2014.
- Mr. Virender Pratap Singh, Best Poster award in International conference on "Emerging advanced technology and applied science" at AU, Baddi (H.P.) May, 2015.
- Mr. Prashant , Best Poster presentation at National conference on Multifunctional Advanced Materials, Shoolini University, Solan, H.P. from May 2-4, 2013.
- Ms. Sonika Rani, INSPIRE fellowship.

National and international recognition received by the faculty from reputed professional bodies and agencies:

Select Awards and Recognitions include:

- o Dr PK Khosla
  - Siksha Ratan Award
  - ICAR Panels on Agriculture and Home Science Education and Agro-forestry
  - Member Task force DST
  - Member Task force DBT
  - Member NAS committee
  - Research Advisory Committee, GBPIHED
  - Rubber Institute, Agartala
  - National Center on Agro-forestry, Jhansi
  - National Mushroom Research Center, Solan
  - Academic Councils of a half dozen Universities
  - International Society of Tropical Foresters, USA

- o Prof Atul Khosla.
  - 'Visionary Leader Award' for Excellence in Education at the 3rd Higher Education Summit by CAREER OPTIONS at New Delhi, 2014.
  - Independent Director, Gabriel India Ltd.
  - Elected Global Partner, Oliver Wyman PLC.
  - Member Advisory Board, Ankur Capital

- o Dr Sunil Puri
  - Fellow of NAAS from 2005
  - Tropical Agroforestry of IUFRO Division 1
  - Silviculture and Management in Arid and Semiarid Regions of IUFRO Division 1 (Silviculture)
  - Quinquennial Review Team (QRT)
  - AICRP on Agroforestry
  - Academic Council of Dr Panjabrao Deshmukh Krishi Vidyapeeth, Akola
  - Indian Society of Agroforestry, IGFRI, Jhansi
  - Forestry/Agroforestry Subject Matter Committee
  - Steering Committee of North East Hill University (NEHU), Shillong

- Advisory Committee of Indraprastha Vishwavidyalaya, Delhi
- Chhattisgarh State of Medicinal and Aromatic Plants Board, Raipur
- Governing Body Member of Indian Society of Tree Scientists, Solan

o Dr. Neeraj Mahindroo
- Member ICMR Expert Group for Medicinal Plants Monographs
o Dr Deepak Pathania.
- Member board of studies of UGC Autonomous College, Mahilpur, Distt. Hoshiarpur, Punjab-146105.
o Dr. Neeraj Gupta
- CAS fellowship from Chinese Academy of Sciences, China
- Fulbright Nehru Postdoctoral Research Fellowship (2011-12): Awarded by United State India Educational Foundation (USIEF)
o Dr. Kalpana Chauhan
- Summer Research Fellowship from Science Academies
o Dr. Radheshyam Rai is a member in Executive Committee of International Union of Advanced Materials (IUAM), China
o Dr. Atul Thakur is a Life member of
- High Energy Materials Society of India (HEMSI)
- Innovative Science Research Society (ISRS)
o Dr. Preeti Thakur is a Life member of
- High Energy Materials Society of India (HEMSI)
- Innovative Science Research Society (ISRS)
o Dr. Atul Pandey is Life member of
- The Indian Society for Technical Education (ISTE),
- Indian Physics Association (IPA) and
- Him Science Congress Association (HSCA)

o Dr. Radheshyam Rai is a Life member of
- Him Science Congress Association (HSCA)
- Indian Physical Society of India
- Aryabhat Research Journal Of Physical Sciences

3.4.5 Indicate the average number of successful M.Phil. and Ph.D. scholars guided per faculty during the last four years. Does the University participate in Shodhganga by depositing the Ph.D. theses with INFLIBNET for electronic dissemination through open access?

Average number of Ph.D. and M. Phil. scholars guided per faculty during last four years is 40. University participates in Shodhganaga by depositing all Ph.D. and M. Phil. Thesis.

3.4.6 What is the official policy of the University to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.

The University has taken the challenge to avoid malpractices in research by taking the following pre-emptive steps:

- o A credited course has been introduced in Ph.D. program on research ethics.
- o University has made it mandatory to check the thesis and reports for plagiarism using software. The supervisor needs to give the certificate that the document is not plagiarized. No plagiarism cases have been reported from the University as yet.

3.4.7 Does the University promote interdisciplinary research? If yes, how many interdepartmental / interdisciplinary research projects have been undertaken and mention the number of departments involved in such endeavors?

Yes, the University encourages interdisciplinary research and has constituted teams to focus on selected research areas.

Table 3.7 List of Interdisciplinary projects

PI/Co-PIs	Project Title	Funding agency	Grant
Dr. R. Saini (Biotechnology) (PI) & Dr. N. Mahindroo (Pharmaceutical Sciences) (CO-PI)	Evaluation of with anolide lactones as immunomodulators to induce granulysin expression in immune cells conferring cytotoxicity towards cancerous cells	DBT	2,500,000 (Approved)

PI/Co-PIs	Project Title	Funding agency	Grant
Dr. N. Mahindroo (Pharmaceutical Sciences), Dr. V. Jaiswal (Bioinformatics), Dr. J. H. Guh (National Taiwan University)	Design, Synthesis and Evaluation of Hh-Gli Pathway Modulators	GITA	(Under review)

3.4.8 Has the University instituted any research awards? If yes, list the awards.

University promotes research through recognition of faculty members pursuing research from time to time. The following awards have also been instituted.

- o An award instituted by Shoolini University to promote faculty members who are able to obtain extramural funding from funding bodies of Govt. of India: Equivalent to 3% of the contingency budget.
- o A special award of Rs. 10 Lakh has been instituted by Shoolini University for those researchers who publish their research findings in Journals like Science and Nature.

3.4.9 What are the incentives given to the faculty for receiving state, national and international recognition for research contributions?

The University is not in a position to award financial incentives to faculty who receive such recognition however they are honored in University functions.

3.5 Consultancy

3.5.1 What is the official policy of the University for Structured Consultancy? List a few important consultancies undertaken by the University during the last four years.

Shoolini University promotes and supports consultancy projects as an official policy. It encourages its faculty to undertake consultancy assignments with industry, institutions and organizations. These consulting projects typically entail providing innovative solutions to the industry for improving their products and processes, requiring professional expertise of the faculty and utilization of the infrastructural facilities available with the University. Having faculty with a blend of industry experience and

academic excellence coupled with well-equipped research labs helps the University to attract consultancy projects.

Despite having been in existence for a relatively short period of 5 years the University has done well in initiating consultancy projects in significantly diverse fields. Some of these are listed as under:

Table 3.8 List of Consultancies

Consultancy	Organization	Year
Career Counselling	CST Dholanji, Solan	2015
Role of Gold in Economic Sustainability of Himalayan	World Gold Council	2015
Personality Development & Soft Skills' for BBA Students	SILB, Solan under H.P. University	2015
Buying Potential of Solan Town	Propbrowser Realty India Pvt Ltd	2014
Troubleshooting and problem-solving for marketed formulation.	Meridian Medicare Pvt. Ltd, Solan, H.P	2014
Size reduction of vitamin D_3 to nano scale.	Tirupati Medicare Ltd, Paonta Sahib, H.P	2014
Personality Development & Soft Skills' for BBA Students, 25-27th November, 2013	SILB, Solan under H.P. University	2013
SPRINT for UG Students- Soft Skills & Persona Enhancement, 15-16th February, 2013	SCOBACS, Solan	2013
Food Technology	HPMC Shimla	2013
Workshop for UG Students-Professional Skills, 19-20 December, 2012	Government Degree College, Solan	2012
Workshop on Personality Development & Soft Skills for BBA Students, 29th November-1st December, 2012	SILB, Solan under H.P. University	2012
Workshop on Personality Development	SILB, Solan under H.P. University	2011
Campus to Corporate (C2C) Seminar	Shoolini Institute of Life Sciences & Business Management, Solan under H.P. University	2010

3.5.2 Does the University have a University-industry cell? If yes, what is its scope and range of activities?

There are multiple platforms on which Shoolini University engages with industry. The Office of International Affairs and Industry Alliances under a Dean focus on collaboration with Academia and Industry. The Placement and Career Development Cell under a Director maintains industry relations, inviting industry experts for student interaction and placement drives on a regular basis. Apart from these, individual faculties constantly strive to establish and strengthen industry tie-ups for collaborative research and consultancy projects.

3.5.3 What is the mode of publicizing the expertise of the University for Consultancy Services? Which are the departments from whom consultancy has been sought?

Shoolini University is a member of CII and other industry associations like ASSOCHAM. It actively participates in these forums and leverages such opportunities to showcase its expertise and capabilities to support the innovative endeavors of the industry.

Consultancy has been sought from all faculties, e.g. School of Business Management and Liberal Arts, Faculty of Engineering and Technology, School of Pharmaceutical Sciences, Faculty of Applied Sciences and Biotechnology etc.

3.5.4 How does the University utilize the expertise of its faculty with regard to consultancy services?

Faculty members are encouraged to take up consultancy assignments. Apart from honorarium permissible under the University's Consultancy Policy, it is also a key performance criteria during annual appraisal. Faculty members are encouraged and equipped to undertake consultancy services by being given free hand to attend national and international conferences, and to procure journals etc.

3.5.5 List the broad areas of consultancy services provided by the University and the revenue generated during the last four years.

Table 3.9 List of broad areas of consultancies

Broad Areas of Consultancy	Revenue Generated
Economic Survey	25,000,00/-
Market Survey	40,000/-
Food Technology	2,00,000/-

Broad Areas of Consultancy	Revenue Generated
Formulation Technology	50,000/-
Nanotechnology	50,000/-
Soft Skills Development	20,000/-

3.6   Extension Activities and Institutional Social Responsibility (ISR)

The University strongly believes that teaching, research and extension are an integral part of higher education for enhancing the employability of its graduates.

It played its role in societal responsibility (ISR) by organizing a host of activities in uplifting and awakening the surrounding population to bring them in the natural stream.

3.6.1   How does the University sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programs which have created an impact on students' campus experience during the last four years.

The task of Institutional Social Responsibility is sensitized among students by holding workshops, interactions, field activities through Natural Social Service Scheme under the patronage of Dean of Extension Education and Dean Students Welfare. The following is the list of activities in the last four years:

- Blood donation camps
- Tree plantation
- AIDS Awareness Program
- Sexual Harassment Awakening
- Cleaning of local springs in the neighbourhood
- Campus on use of Solar Energy for cooking
- Painting competitions on environmental issues
- Distribution of fruit and forest saplings to farmers for helping them to raise their earning and conservation of environment
- Practical Training to local village women in food processing
- Organization of Spring Flower Festival
- Village adoption for social upliftment
- Upgradation of a primary school in the neighborhood
- Celebration of International Days-World Environment Day, World Forestry Day, World Population Day, World Women Day, World AIDS Day
- Organize INSPIRE activities of Schools in the University campus

3.6.2 How does the University promote University-neighborhood network and student engagement, contributing to the holistic development of students and sustained community development?

The University's neighborhood student network, directed at the socio-economic welfare of stakeholders is organized by Dean Extension in collaboration with Dean Students Welfare. The focus of activity is on villagers who had sold the land to the University for the development of the campus and who subsequently constituted the labor force. In addition the University has selected Panti village in Shimla District where fruits of the horticultural revolution in Himachal Pradesh has not reached due to the backwardness of the region. Free saplings of fruit and forest species are being provided to them along with the technology in collaboration with the University of Horticulture and Forestry. This activity that has taken place over the last four years has yielded fruit and reached the markets.

Institutional social responsibility is also carried out in these adopted villages by the students and the faculty by organizing the following activities:

i. **Adoption of neighborhood Schools Primary and Senior Secondary**
   o Special classes by students and teachers
   o Cleaning the environment of the schools
   o Involvement of School students in cleaning of fresh water springs
   o Celebration of special days
   o Personal hygiene
   o Organizing visits of students to the University campus
   o Guidance on career counselling
ii. **To Diagnose and Design of the farm lands**
   o Organization of Kisan Ghostis Meetings)
   o Guidance for new farm technologies and quality seeds
   o Visits of the farmers to the University
   o Provide technical guidance on food processing
iii. **To Enhance Employment and Socio-economic Upliftment (only for those who sold their lands to the University)**
   o Promotion spiritualization of available money for business pursuits relevant to the University- construction of a hostel for students to University; construction of a paying guest accommodation and restaurant for the students. These are now operational.
   o Free ship to all students who are eligible to seek admission in the University.
   o Seek their participation in all social oriented activities of the University.

3.6.3 **How does the University promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International programs?**

The University being located in the Solan Township is surrounded by a rural landscape, facilitating outreach to the underprivileged. Community and Social Service is undertaken under the aegis of the Dean Extension Education and Dean Student Welfare. Various programs are undertaken throughout the year under their guidance by Program Officers and students of the University. Emphasis is laid in the aforesaid category of villagers.

- National Youth Day
- Blood Donation Camp
- Yearly Marathon Runs are organized on the occasion of the Teachers day with a contemporary theme like; 'Women Empowerment', 'Let's Make India Clean.'
- In addition, the locals and general public are also involved in events like Science Day, World Environment Day, Engineers Day, Pharmacist Day, Yoga Day, Cancer Day and Tech Fest
- In view of the spread of Swine Flu, a special awareness campaign was conducted in March, 2015, and reiterated through a special stall erected during the well-attended Flower Fest.
- Since the local schools and colleges lack facilities, special 'practical' training and coaching is undertaken for them by the students of the University in the campus. This has been well appreciated by the public.
- The University has organized visits of students to the campus to promote a culture of higher learning and research.

3.6.4 **Give details of social surveys, research or extension work, if any, undertaken by the University to ensure social justice and empower the underprivileged and the most vulnerable sections of society?**

- The University ensures frequent interaction with the inhabitants of nearby villages and informal talks are conducted on social problems that afflict them like drug abuse and family violence etc.
- In addition, frequent interaction to resolve problems is held with the 150 plus Class IV staff of the University, who are mostly from underprivileged and vulnerable sections of the society.
- Home based Projects are encouraged among women of the neighborhood, especially of village Majholi.
- Children's Day celebrated for the adopted Primary School and the feature of this is that this is largely done by the students of the University.

3.6.5 **Does the University have a mechanism to track the students' involvement in various social movements/ activities which promote citizenship roles?**

Yes, activities and involvement of students are monitored through the Dean Extension Education. A record is maintained for the activities of the students by the Program Officers designated for the same.

3.6.6 **Bearing in mind the objectives and expected outcomes of the extension activities organized by the University, how did they complement students' academic learning experience? Specify the values inculcated and skills learnt.**

Learning is an ongoing process and informal learning through extension activities enhances awareness levels and the knowledge threshold of the students. Specific values inculcated and skills learnt by the students are listed below:

- o Enhancement of Interpersonal and Communication Skills
- o Understanding the ground realities and problems of the people
- o Human Values and care for the underprivileged
- o Providing spiritual education for ethics and moral values

3.6.7 **How does the University ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the University which have encouraged community participation in its activities.**

The University is highly cognizant of its socio-corporate responsibilities. Apart from the adoption of a local villages and the Schools to make them models for others to emulate, the local community of the Solan Hills is periodically involved in the events organized by the University. Some of the Initiatives taken by the University are listed below:

- o Swachh Bharat Abhiyan
- o DBT sponsored training program was organized on Molecular Biology techniques for college lecturers from November 10-19, 2011. Department of Biotechnology, Govt. of India funded Shoolini University to organize the said training program and 30 college lecturers and research students benefitted.
- o The University celebrated "Fascination of Plants Day" in collaboration with European Plant Science Organization (EPSO) for creating awareness amongst the people about the environment and its value for the human society. Events held on 18 May 2012 & 17 May 2013 were well received. A similar event is planned this year.

- o An Awareness program for farmers on Protection of Plant Varieties and Farmers Rights, sponsored by PPV&FRA, Ministry of Agriculture, Govt. of India. 100 farmers from various places of Himachal Pradesh benefitted from the program.
- o Organized lectures on yearly basis at Govt. College Sanjouli, Shimla, Solan, Bilaspur, Arki to aware science graduate students about latest development in the field of Biotechnology and Microbiology and to apprise them with enormous carrier prospects in the said fields.
- o One day camp for rural women was conducted to provide hands on training on the development of various food products at home scale.
- o Organized lectures at various schools in different districts of Himachal Pradesh to familiarize the students with the field of Biotechnology and Microbiology and about enormous carrier prospects in the said fields.
- o Organized one day practical session on Biotechnology for school lecturers.
- o Observed cancer day to aware the students about the menace of cancer.
- o Regular training were provided to students of neighboring institutes and universities in the areas of Biotechnology, Chemistry and Physics.
- o Three months training on Molecular Biology was provided to Mr. Reg Embelton from UK.
- o Afforestation Drive and Flower Fest. In that students supplied plants and saplings developed in the University to the general public on nominal payment.
- o Periodic talks and Interaction
- o BIZQUIZ

3.6.8 Give details of awards received by the institution for extension activities and/contributions to social/community development during the last four years.

- o Letter of Appreciation from the Deputy Commissioner for community development drive.
- o Letter of Appreciation from the local MLA and Village Pradhan for community service and help provided to the BPL families and school children.
- o Letter of Appreciation from Gram Pradhan of Village Sultanpur, Distt. Solan for cleaning drinking water resources.

- o Letter of Appreciation from the Gram Pradhan of Village Banooti, Distt. Shimla for distribution of fruit plant saplings for last five years.
- o Recognition for organizing the blood donation camp from Ministry of Health, Govt. of Himachal Pradesh.

3.7   Collaboration

3.7.1   How has the University's collaboration with other agencies impacted the visibility, identity and diversity of activities on campus? To what extent has the University benefitted academically and financially because of collaborations?

The University collaborations have significantly impacted the visibility, identity and diversity of the University. The collaborations with academic institutions – both in India and abroad, have encouraged institutional networking with the industry, government bodies like DST, DBT, DAE, DRDO, ICMR and MNRE and non-government organizations like ASSCHOM and CII. The collaborations have benefited the University in academics and research in following ways:

- o Tie-ups with other universities including foreign universities have helped in developing student exchange programs for example one semester exchange programs with South Korean and Taiwan Universities are currently.
  - Collaborations have helped in faculty exchange. Professor from Seoul National University visited Shoolini University for One month.
  - Foreign Students have shown interest in University's programs thus increasing student diversity. Student from South Korea completed a semester at Shoolini University. A Kenyan student has registered for Ph.D. programs.
- o Linkages with industry and academia have helped to develop curriculum which meets contemporary needs of industry and academia.
- o The University has benefited from research collaborations resulting in better funding and research output. The University has been able to get joint research funding with University of Otago, New Zealand, thus giving opportunity for exchange of research personnel and utilization of facilities, currently not available at Shoolini University. Research collaborations with National Institute of Health, USA, National Taiwan University, Taipei, NIPER, Panjab University, PGI, NIMR, University of Leeds, Chung-Yuan

Christian University, Taiwan, IMTECH, Chandigarh, IISc, Bengaluru etc. have helped improve the research output and quality.

- o University has been nominated by Engineering Watch as the nodal agency in North India to conduct research on defence related technologies for Defence Research and Development Organisation (DRDO). Research in areas of nano-technology, food technology and defence engineering is being carried out.
- o University has been able to generate internship opportunities in various research institutes and industries through its linkages.
- o On behalf of the Department of Science and Technology, Government of India, the University conducts INSPIRE program for promoting interest in basic science and approximately 5000 school students have been benefitted till now..
- o University collaborates with local civic bodies and district administration by participating in a number of social welfare activities like 'Swachh Bharat Abhiyan', afforestation, distribution of free fruits and medicinal plants, training of the underprivileged locals in the latest techniques and best practices in agriculture and horticulture.
- o A sensitization program was organized in collaboration with Ennoble IP and corporate consultations to provide awareness about IPR and encourage creativity among the faculty and students.

3.7.2 Mention specific examples of how these linkages promote:

Curriculum Development:

Linkages with industry and academia have helped develop curriculum which meets contemporary needs of industry and academia. The Board of Studies in each faculty has three external members, two from academia and one from industry. The linkages with industry and academia have thus helped in development of curriculum which would help the students in their careers. Specific examples are enumerated:

- o The curriculum for mechanical engineering was developed in consultation with Anand Automotives.
- o Curriculum in Management Sciences in consultation with Genpact.
- o Curriculum in B. Pharmacy modified to meet industry expectation in consultation with experts. The courses like pharmacovigilance were added to the curriculum.

Internship:

University has been able to generate internship opportunities in various research institutes and industries through its linkages. Every year students are placed in industries like Anand Automotive, DAMCO, Cipla, Abbott, Tirupati Medicare Ltd, Meridian, Cadila, Dabur, Panacea Biotech, HPMC, Nutra Helix etc. for internships. In Management Sciences, 75% of interns are also paid stipend by the company, for example by Oliver Wyman, Genpact, Marsh India, Mercer, etc.

On-the-job training:

The University has developed linkages with industries for 'On-the-job' training. Students have been hired under the apprenticeship program by industries like Ranbaxy, Sentiss Pharma etc.

Faculty exchange and development:

University has MoUs with various Universities and educational institutions for faculty exchange and development. Specific examples are enumerated:

- o Prof B.L. Dubey from University of Alaska, Anchorage, USA conducted a workshop for students and faculty on application of Myer Brigg's Type Indicators, on 24th March, 2015.

- o Prof P.K. Khosla, Dr R.P. Dwivedi and Dr Atul Thakur visited Taiwan, South Korea and China (Sept – Oct 2014)

- o Dr. Hyoung In Lee, a visiting Professor from Seoul National University, South Korea taught a course in Mechanical and Electrical Engineering from Feb 04, 2014 to Feb 25, 2014.

- o Prof Ashley Braganza, of the Management from Brunel University, UK conducted a training Workshop on teaching methodologies for Case Studies from 15 to 16th October, 2013.

Research:

The University has benefited from research collaborations resulting in better funding and research output. The University has been able to get joint research funding with University of Otago, New Zealand, opening opportunities for exchange of research personnel and utilization of facilities. Research collaborations with Panjab University, PGI, NIMR, University of Leeds, Chung-Yuan Christian University, Taiwan, IMTECH, Chandigarh, IISc, Bengaluru etc. have helped improve the research output and quality.

Publication (International/National):

A number of National and International publications have already been published as part of our collaboration with various national and internationally academic and research institutes (Please refer School reports for details).

Consultancy:

The collaborations with Industries and Institutes helped in attracting consultancy projects. Some of them are mentioned:

- o The MoU with Meridian Medicare Ltd. helped in getting Consultancy project for problem solving for marketed formulations.
- o HPMC & IIT Mumbai

Extension:

- o Yogoda Society helped in procuring the plants which were jointly distributed to farmers.
- o The collaboration with the District Administration of Solan helped in organizing Swach Bharat Campaign at Solan.
- o The collaboration and long term association with blood banks have helped in organizing blood donation camps regularly.

Student placement:

- o Student placements has been promoted as part of our existing collaborations like with GENPACT, Anand Automotive, Meridian Medicare Ltd., Tirupati Medicare Ltd. etc.
- o Students have a chance to complete one semester of their degree program in our collaborating Universities in Taiwan, South Korea and China. Some also get fellowship.

3.7.3 Has the University signed any MoUs with institutions of national/ international importance/ other universities/ industries/corporate houses etc.? If yes, how have they enhanced the research and development activities of the University?

University has signed MoUs with institutions of national/international importance, universities and industries. University is having joint research projects with these universities and industries thus improving the quality of research output. At the same time, MoUs with Foreign Universities have not only enhanced awareness and knowledge levels of our students but have given them an exposure to global standards. MoUs with Industry and

Cooperative Houses helped in development of the curriculum relevant to the skill requirements in the industry thus improving the employability of the students. University has developed meaningful alliances with several organizations. The representative list is given below:

- o **International Academic Alliances:**
  For transfer of knowledge, student and faculty exchange, joint researches, conferences and training programs, we have developed strategic partnerships with:
    - Seoul National University, South Korea.
    - Gachon University, South Korea
    - The University of Suwon, South Korea
    - Gwangju Institute of Science and Technology
    - Chung Yuan Christian University, Taiwan.
    - University of Ulster, Northern Ireland,
    - Bukovinian State Medical University, Ukraine.
    - Sierra Bio Life, Australia.
    - Lanzhou University, China.
    - Plant and Poisons Board of Kenya
    - National Taiwan University, Taiwan
- o **Alliances with Industry:**
    - GENPACT
    - Tirupati and Meridian Medicare Ltd.
    - HPMC
    - Anand Automotive group
    - Transgenic Life Sciences & National Bureau of Fish Genetic Resources
- o **National alliances with Research and Academic Institutes:**
    - IIT Mumbai for organizing workshop on 'Aakash' Tablet.
    - IMTECH, NIPER, PGI, Chandigarh & Eternal University, Baru Sahib

(Please refer School reports for details.).

3.7.4 Have the University-industry interactions resulted in the establishment/ creation of highly specialized laboratories / facilities?

Yes, the specialized laboratories/facilities have been established through these research alliances. Please refer to School reports for details. Reliance funded lab in Computer Science, Anand Automobile lab etc.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

Availability of quality infrastructure and access to quality learning resources are essential for any institution striving for global excellence. Apropos, in the initial five years, the emphasis of the University was on creation of the required infrastructure and develop facilities. Having achieved the targets set out, the current phase of development focuses on consolidation, bridge gaps; emphasis being on providing a wider basket of learning resources and enhancing the outreach of the University.

4.1   Physical Facilities

4.1.1   How does the University plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

The University has a central 'Planning' Committee, composed of members from the Board of Management. This is the apex body that lays down future plans, allocates funds and drives projects for enhancing and/ or carrying out improvements of infrastructure or resources. Organization of this committee with its functional entities is given below:

Table 4.1 Structure of Planning Committee

Board of Management

Planning and Development Committee

Development Cell (Estates Officer)	Maintainence Cell (Director Operations)	IT Cell (Chief Information Officer)
Responsible for planning, construction, ensuring necessiary services and for undertaking repair and maintainence of infrastructure	Responsible for 'day to day' maintainence and meet the needs of the University. This Includes catering, accomodation, providing services, housekeeping etc.	Responsible for planning, development, procuring and maintainence of ICT equipment and Services. This includes Wi-Fi, LMS, KMS and eUniv Platforms

At the user end, optimizing infrastructure and facilities is the responsibility of the concerned faculty through the respective deans.

4.1.2 Does the University have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.

In order to provide a world class exposure to foster global excellence, the University lays great emphasis in improving the overall experience of students. Digitization of the library, launching of a multi-functional Enterprise Resource Planning (ERP), enhancing the reach of the eUniv platform and creation of a world class auditorium, being recent examples. For pushing the bar in academics and research and to provide a global learning environment, the following initiatives have been taken:

- Addition and/or upgradation of existing labs and facilities.
- Four new Labs have been created – Biotechnology Research Lab, Gene Regulation Research Lab, Analytics lab and Language Lab.
- All classrooms have been ICT enabled.
- Auditoriums inter linked and provided video-conferencing facilities.
- A 200 seater Cineplex has been added.

4.1.3 How does the University create a conducive physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services?

Since the University aspires to be a global center for research, labs are being constantly added, along with qualitative up-gradation of facilities to match international standards. There are a total of 29 labs exclusively for research, mostly funded from external sources. Overall, the University embodies 105 teaching and research labs, workshops, machine rooms, etc. to meet AICTE, PCI and UGC norms. Details and faculty-wise distribution of labs is given below:

Table 4.2 Distribution of Labs

Faculty-wise Distribution of Laboratories/Facilities							
Faculty	**1***	**2**	**3**	**4**	**5**	**6**	**Total**
Biotechnology	12	12	--	01	--		25
Electronic & Computer	10	03	--	03			16
Engineering, Mechanical & Civil Engineering	19	04	1+2	--	--		26

Faculty	1*	2	3	4	5	6	Total
Management Sciences & Liberal Arts	02	--	--	01	--		03
Pharmaceutical Sciences	07	05	--	01	--	01	14
Basic Sciences Chemistry	03	02	--	01			06
Physics	01	04	--	--	01		06
Botany	02	02	--	--		01	05
Analytics & Language Labs	01	01	--	--	02	--	04
Total	**57**	**33**	**03**	**07**	**03**	**02**	**105**

*

1. **Teaching**
2. **Research**
3. **Workshops/Drawing Halls**
4. **Computer Labs**
5. **Dark Room-E-Studios**
6. **Animal House/ CIF**

4.1.4 Has the University provided all departments with facilities like office room, common room and separate rest rooms for women students and staff?

Yes, all possible faculties are provided to include offices, common rooms, cafeterias' etc. In addition to washrooms for ladies in all blocks and floors, a rest room has been created, which is also used as a crèche/day care center for ladies with young children.

4.1.5 How does the University ensure that the infrastructure facilities are disabled-friendly?

Despite the fact that there are no students who have medical disabilities, (except one hearing impaired girl student), the University is cognizant of its obligation to create/ improve facilities for the disabled/differently abled. Notwithstanding the fact that all blocks are approachable by road, a progressive plan has been made to create/ modify infrastructure across the campus to meet the varying requirements. Apart from providing special health care and periodic medical checkups, as the first step, the Yogananda Knowledge Center has been made user friendly for the differently abled. Specific measures taken are enumerated:

- o Provision of a special ramp.
- o Access ramp for entry to the lawn from the inside on the top floor.
- o Creation of a disabled friendly washroom.

In addition, the following infrastructure/ measures has either been completed or planned in the near future:

- o Creation of a ramps for wheel chairs from the Main Office to the Health Center, Ratan Tata Hall, Engineering and Pharmacology blocks.
- o Two rooms in boys and girls hostels re-configured.
- o Installation of a lift in the 'G' Block.
- o Creation/conversion of a washroom in each block to meet the requirement of disabled students and/or staff.
- o Provision of 'E' carts for movement over longer distances.

4.1.6 How does the University cater to the requirements of residential students? Give details of

Capacity of the hostels and occupancy (to be given separately for men and women)

Table 4.3 Details of Hostels

Boys Hostels		Girls Hostels	
Hostel Name	**Occupancy**	**Hostel Name**	**Occupancy**
Aryabhatt	261	Sarojini Naidu	204
Chanakya	161	Kasturba Gandhi	294
Aryan	73	Mother Teresa	55
Vasundhra	92	Meera	21
Total	**587**	**Total**	**574**
Total strength of students in hostels is 1,161. The University has plans to construct a Working Woman's and International Hostel to cater for lady teachers and foreign students			

The University has eight hostels, four each for men and women which meets the current requirements. Details of the existing hostels are tabulated:

Management of Hostels. The management of hostels and its various functional committees is illustrated:

Table 4.4 Management of Hostels

Discipline Committee
Food Committee
Welfare Committee
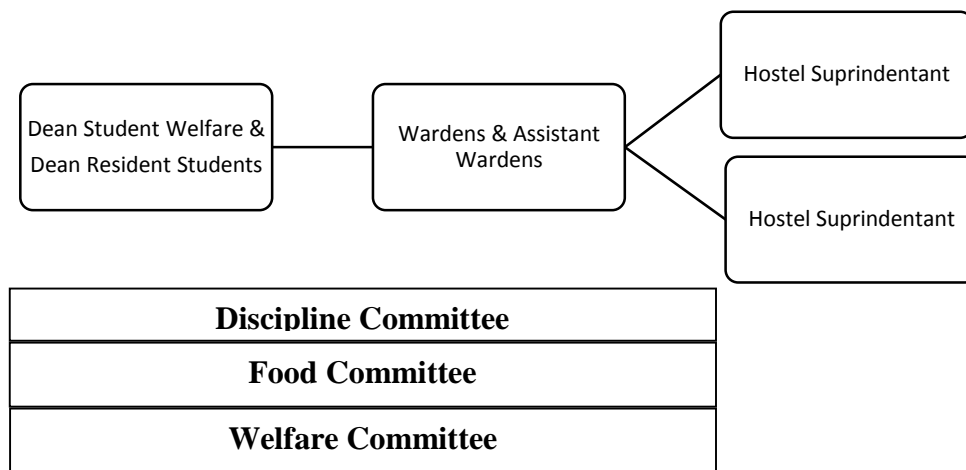
Recreational facilities in hostel/s like gymnasium, yoga center, etc.

The following recreational facilities are available:
- o International standard Basketball court.
- o Indoor and outdoor Badminton courts.
- o Two gymnasiums-one common and one exclusively for girls.
- o Meditation and Yoga Center.
- o Library with Newspapers and Magazines. In addition, Girls Hostels also have a Mini Library and other hostels are provided newspapers.
- o Punching bags and gloves for Boxing/sparring.
- o Table Tennis, Carom boards and Chess in Common Rooms.
- o Restaurant and Café's.
- o Documentaries and films shown in the Cineplex (200 seats).
- o Cultural events are held in the Open Air Theatre (500 seats).
- o Large screen projection in the Cineplex, Ratan Tata and Peter Drucker Halls and Dr KPJ Abdul Kalaam.

Broadband connectivity/ Wi-Fi facility in hostels.

Broadband connectivity is available throughout the campus and the facility extends to all academic blocks, common facilities and hostels. Within the hostels, common rooms have been configured as Wi-Fi Hot Spots for enhanced connectivity.

4.1.7 Does the University offer medical facilities for its students and teaching and non-teaching staff living on campus?

The University has a four bed Health Center and employs the services of two experienced doctors and three nurses; two nurses on duty at night. Two ambulances are available round the clock for taking patients to the hospital at Solan, if required. Clinical tests like lipid profile etc. are done in the Health Center itself. In addition, the University has been extending medical assistance to the general public of neighboring villages.

4.1.8 What special facilities are available on campus to promote students' interest in sports and cultural events/activities?

The University provides facilities in the following games:

1.	Badminton	Indoor and outdoor stadium.
2.	Table tennis complex.	Provided in all Hostels and indoor sports
3.	Basket Ball	
4.	Gym facilities	
5.	Chess	
6.	Carom Board	
7.	Boxing coaching	Boys only
8.	Volley ball	Boys only
9.	Cricket	Boys only

4.2 Library as a Learning Resource

The Yogananda Library of Shoolini University has evolved as a Multi-dimensional learning facility and transformed itself as a Knowledge Center, in keeping with the stated vision of the University.

The five storey building that houses the Knowledge Center is a state-of-the-art, architectural marvel using 'green' technology. With a naturally-lit central atrium, wooden interiors, spacious layout, topped by a designer lawn, the Yoganand Knowledge Center is an icon of the Shoolini University which can concurrently accommodate 300 students.

Apart from the Central Library, there is also a well-stocked study center for use of students in the heart of Solan Town. Collectively, the Knowledge Center has 34,711 (28,870 plus 5841) books and subscribes to a plethora of e-books, journals, e-journals, magazines and newspapers. Completely Wi-Fi enabled, with OFC connectivity and a large capacity UPS and back-

up generator, the YKC is a pulsating heart and the center of activity for the students and faculty.

Departmental Libraries.   In addition to the central library, each school maintains a library, which is an adjunct the main Library. In view of the central location of the Central Library, school libraries have been created as Wi-Fi Hot Spots, transforming them as 'Virtual Libraries' with access to various resources including LMS and KMS resources through the central repository. Notwithstanding, these libraries have essential reference material, copies of dissertations, theses, papers and domain specific projects.

4.2.1 Advisory Committee.

Yes, the composition of the Library Advisory Committee is tabulated:

Table 4.5 Library Advisory Committee

Faculty Members		Student Members	
Name	Appointment/ Faculty	Name	School & Class
Prof. Atul Khosla, Pro Vice Chancellor	**Chairperson**	-	-
Brig Amar Cheema, Dir.	Vice Chairperson	-	-
Dr. Kamal Dev	Bio & Food Technology	Nitin Sharma	Ph.D.
Dr. Rohit Goel	Pharmacology	Megha Sharma	Ph.D.
Dr. Kuldeep Rojhe	Business Management & Liberal Arts	Vivek Jasrotia	MBA
Mr. RK Saini	Engineering & Technology	Ankit	B Tech IV Sem
Dr. Deepak Pathania	Basic Sciences	Neha	MsC Chemistry III Sem
Mr. Sachin Sharma	Chief Information Officer	-	-
Ms. Arti Chanta, Deputy Librarian	**Member Secretary**	-	-

4.2.1 Initiatives taken.

Recent initiatives taken in the library are enumerated:

1. Full automation of library services with digital access and referencing system.
2. Digital linking of the Central Library and School libraries.
3. Electronic Access Control System and CC TV Coverage.
4. Creation of Analytics and Language Lab.
5. Introduction of E- newspapers and magazines.

4.2.2 Details

1. Total area of the library (Square Meters)   : 2616.15
2. Total seating capacity   : 300
3. Working hours:

    a) Working Days and Holidays   : 8.00 AM to 10.0 PM
    b) Vacations   : 9.00 AM to 5.0 PM

4. The five stored library has adequate seating and is well-lit with natural lighting, exuding an atmosphere conducive to learning. Floor wise layout is given below:

Table 4.6 Details of Yogananda Library

Ground Floor	Student Activity Hall, Faculty Club, cafe and Main Lawn
First Floor	Research Journals, public computers, Language and Analytics Labs, E–studios, Thesis/Dissertation/Projects and Emergency exit
Second Floor	Main entry with Access control. Foyer, Circulation (Issue/receipt) section, New Arrivals Racks, Resource displays (Touch screen monitors), E-Newspaper/Magazine Screens, Library office, Reference Section, Life and Basic Sciences Sections, Management Section, Bag room, washrooms and emergency exit.
Third Floor	Engineering and Technology section, Book Bank and Reading Areas, Special Wash room for the disabled
Fourth Floor	General section, Reading areas and Terrace Lawn

Floor plans are prominently marked, facilitating use by occasional visitors.

4.2.3 Details of Library Holdings

a) **Print**
- ✓ Books (including Study Center)   : 34,711 (28,870 in Main Library and 5,841 in Study Center)
- ✓ Back Volumes   : 128
- ✓ Thesis   : 895

b) **Average number of books added during the last three years :** 14002

c) **Non Print :** 28

d) **Electronic (E books and Journals)**: Over 1.5 Lacs books and over 9000 e Journals through EBSCO and DELNET

e) **Special Collection (Text books, reference books, standards, patents)**
- ✓ Text books   : 25701
- ✓ Reference Books   : 3169
- ✓ Standards (Hard and Soft copies) : Nil

Subject wise breakdown of the books and journals is given in the following charts:

Table 4.7 Subject wise Breakdown of Books and Physical Journals
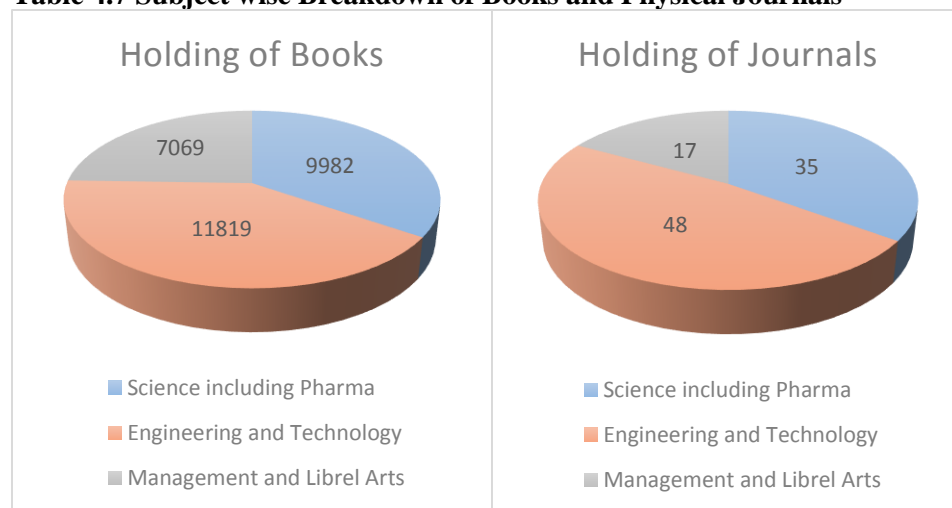
4.2.4 What tools does the library deploy to provide access to the collection?

a) The library services uses 'Pearl plus MySQL' based on KOHA software.

b) The webpage including holdings, booking and queries can be accessed through the University intranet.

    c) Access to centrally subscribed research sites and other libraries can be accessed through a password generated access system.

4.2.5 To what extent is ICT deployed in the library? Give details with regard to:

    a) **Library Automation.** Though the entire Library is Wi-Fi enabled, the following are provided:
        i. Total number of computers for public access : 24
        ii. Total number of printers for public access : 2
        iii. Intranet bandwidth for library : 65 Mpbs
        iv. Institutional repository : Through Intranet
        v. Participation in resource sharing networks/consortia : eUniv, EBSCO, DELNET and Open Sources.

4.2.6 Provide details (Per month) with regards to:

    a) Average number of walk-ins : 11,730
    b) Average number of books issued : 6,150
    c) Average number of books returned : 5,850
    d) Ratio of library books to students enrolled : Over 1: 110
    e) Average number of books added over last four years : 20,550
    f) Average number of log ins to OPAC : 31,564
    g) Average number of log ins to e-resources : 3,010
    h) Average number of e-resources downloaded/printed : 1,456
    i) Number of IT literacy trainings organized : Part of orientation and bi-annually for library staff.

4.2.7 Specialized Services.

    a) **Manuscripts.** Being new, currently not available.
    b) **Reference.** Subject wise reference section is available to users; barcoding of such books/references has been done exclusively.
    c) **Reprography.** Two heavy duty printer – photocopier cum scanner are centrally available. In addition, students can get reproductions through commercially installed machines within the campus.
    d) **Information Deployment and Notification.** Through University Intranet services and centrally installed displays.
    e) **OPAC.** Electronic cataloguing and description for mapping resources.
    f) **Internet Access.** The entire library is Wi-Fi enabled. Since, students use personal laptops, this can be used anywhere.
    g) **Downloads.** Security to weed out unwanted downloads is inbuilt.

h) **Printouts.** Can be obtained on payment basis.
i) **Reading List/Bibliographic Compilation.** Assistance of library staff extended.
j) **In-house/Remote access to e-resources.** Being done in a phased manner as part of the eUniv project.
k) **User Orientation.** Being conducted for new students and faculty at the start of a semester/joining.
l) **Assistance in searching Databases.** Periodic notices on web site for new subscription of e–resources. List of sites and log-in procedure displayed in all sections of the library.
m) **INFLIBTNET/IUC Membership.** Subscribed to.

4.2.8 **Library Budget details and amount spent for purchasing new books and journals in Academic Years, 2013-2014 and 2014-15.**

Year wise details are tabulated below:

Table 4.8 Library Budget

2013-2014

Head	Budget	Spent	Books/Journals Added
For Books	2.5	2.48	4210 (8012 books added in 2012-13)
Book Bank	Nil	Nil	Not created
Print Journals/magazines	0.75	0.80	98 plus 22
E-database	Nil	3,75	IEEE package
Misc Expenditure	1.5	1.56	

2014-2015

Head	Budget	Spent	Books/Journals Added
For Books	3.0	3.25	1198
Book Bank	Nil	Nil	799 (internal transfer)
Print Journals/magazines	4.5	4.69	
E-database	0.49	0.49	DELNET package
Misc Expenditure	5.5	5.4	

Academic Year 2015-16.

A budget of Rs 40.50 lacs (including salaries) has been approved for the Yogananda Knowledge Center. Major highlights are listed below:

- 80 percent increase in allocation for books.
- 2349 percent increase in subscription for e resources.
- Improvements in Language Lab

4.2.9 What initiatives has the University taken to make the library a 'happening' place on the campus?

Strategically located in the heart of the campus, the serene atmosphere provided by the Yogananda Library makes it a sought after place. Since the ground floor houses the Activity Center, various events are conducted.

4.2.10 What are the strategies used by the library to collect feedback from its users? How is the feedback analyzed and used for improvement of the library services?

The feedback mechanisms that are in vogue are given below:

a) Face to face interactions during working hours.
b) E Mail of Chief Knowledge Officer and Librarian
c) Written Feedback including suggestion boxs.
d) Visits and inspections.
e) As part of overall feedback, each semester.

Based on the above, improvements in the system and resources are incorporated. Depending on the feedback, library timings have been enhanced and subscriptions of magazines have been changed/added.

4.2.11 List the efforts made towards infrastructure development of the library in the last four years

Academic Year	Improvements
2011-12	Prior to the new library building coming up in 2013, the library was housed in the administrative block. Since construction was ongoing, emphasis was on building inventory, rather than infrastructure.
2012-13	The above process was still going on. Maximum addition of books took place during this period.

Academic Year	Improvements
2013-14	Inauguration of the Yogananda Library and shifting of resources Introduction of CC TV as pilot project Addition of 4210 new books
2014-15	Introduction of Full solution Automated Library Services Electronic Access Control System and CC TV System Interlinking of School and Central Library Creation of Analytics and Language lab E-newspapers and Magazines Addition of 1198 new books Creation of a Book Bank

4.3   IT Infrastructure

In keeping with Shoolini University's Mission to be counted as a leading global institution, technology is being leveraged as the enabling platform. ICT is being exploited to provide outreach and the University is progressively making efforts to upgrade and concurrently promote the culture of exploiting technology for attaining global competencies.

4.3.1   Does the University have a comprehensive IT policy with regard to

IT Service Management

The University has a comprehensive strategy to effect a paradigm shift in the knowledge management system and enhance the functional efficiency of administrative departments. A full-fledged cell is functional for the purpose with a Chief Information Officer at its helm.

The cell acts as the 'in-house' organization for developing and servicing ICT infrastructure in a cost effective manner. Development of the Library Management System, KMS, ERP and eUniv platform was done 'in-house' using open source software and this has proved to be a major success. In addition, specific measures to optimize the use of ICT in the University are listed:

- o   Webmail service for all faculty members, staff and students.
- o   A person specific unique Smart Card to meet ERP requirements.
- o   Online LMS is serviced by System Analyst of Internal IT team.
- o   Facilitation of online student Exams and Quizzes by the IT team.
- o   Software updates done in-house.

- o Desktops, Laptops, Servers etc. are repaired, serviced and monitored on a regular basis.
- o The University also provides laptops and tablets to students, on requirement basis.

Information Security

The University is strict about information security and follows procedures and protocols to ensure this. The following are ensured:

- o A backup system for the sensitive databases such as finance and examinations by use of portable hard disks.
- o Question papers are typed in a strong room using stand-alone computers-No external devices are allowed
- o Crucial offices like HR and Examinations are separated from the main network using VLANs to provide information security.
- o A dedicated team is available to create, modify and delete email accounts.
- o A session time out protocol is in place to mitigate misuse of information.
- o An enterprise level end point antivirus is used.

Network Security
- o A Unified Threat Mechanism has been deployed on the network which acts as the firewall gateway, anti-spam gateway, antivirus protection and bandwidth manager.
- o The University also deploys a centralized antivirus server for detection, web filter and other internet security features.

Risk Management

Though no threats have been detected in the network till date, risk mitigation measures are ensured; important ones are listed:
- o Essential service periodically backed up by the person responsible.
- o Internal threats are managed by unique login authentication and giving proper permissions to resources.

Software Asset Management

The University has a license agreement with Microsoft for their products which include Operating Systems, Office Suite, SQL etc. This license is renewed every year.

Open Source Resources
- o The University has a policy to promote Free Open Source Software, wherever possible.
- o Web servers have Linux – a Free Open Source Operating System.
- o In collaboration with IIT Bombay**,** trainings programs are run regarding various open source technologies.
- o In house software has been developed to conduct quizzes, post articles and facilitate academic activities.

Green Computing

To contribute to Green Computing in the University, the University procures products from reputed vendors who have taken initiatives for recycling of their products and to reduce carbon footprint. Notwithstanding, disposal of E-garbage is outsourced by the University centrally.

4.3.2 Give details of the University's computing facilities i.e., hardware and software.

Total Number of Computers/ Laptops: 933, details of which are tabulated:

Table 4.9 Details of Computers

S. No	Item	Qty.	Configuration
1.	Computer/ Laptops	858	Mix of Core 2 Duo / Core i3 / Core i5 / Core i7 and Atom processors in laptop / netbook configuration
2.	Thin Clients	70	With 3 IBM server, Xeon processor, total RAM of 20 GB and HDD of 500 GB
3	Servers	5	Mix of HP, IBM and Dell, Xeon processor, SATA HDD

- o Computer-student ratio :   1:3
- o LAN facility : 100 % on LAN

The list of Licensed Software is as follows:

A. Office Automation/ Application Software
- o Tally 9.0
- o MS-Exchange Server 2007

       o MS-Exchange Server 2000
       o Exchange Server CAL OLP NIAE 2000
       o Microsoft Front Page 2002 AE
       o MS-Office 2013, 2010, 2007, 2003 & XP
       o MS Access 2010
       o MS Project 2010
       o MS Outlook 2010

B.   **Operating System/ System Software**
       o Windows Server 2008 R2 and 2003 R2
       o Windows 7, 8.1 & XP
       o MS- Windows 2012 server
       o MS-Windows NT 4.0 Server
       o MS- Windows NT 4.0 workstation

C.   **Anti-Virus Scanners.**   Trend Micro Antivirus

Number of nodes/ computers with internet facility: 100 % with internet facility.

Any other.   The University has connected all blocks and hostels by OFC to concurrently broadcast lectures, motivational movies etc.

4.3.3   **What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

The following technologies are deployed and/ or planned in the near future (status given in brackets against each):

       o Directory based Authentication (Planned)
       o Mail, Messaging (Microsoft/Gmail cloud for students and faculty) (Deployed)
       o Web content filtering & caching proxy (Deployed)
       o Gateway security & anti-spam (Deployed)
       o Endpoint enterprise antivirus (Planned)
       o Asset and Inventory Control (Planned)
       o Application servers on Linux and windows (Deployed)
       o DHCP and RADIUS protocols (Deployed)
       o Library management services and online web catalogue (Deployed)
       o Database services (Planned)
       o Many to Many Video-conferencing (Partially Deployed)

- o IP Camera Surveillance (Deployed in Library, planned in other places)
- o Backup and Data Recovery (Planned)
- o Helpdesk services (Deployed)
- o Network security (Deployed)
- o Key management services and DNS (Deployed)
- o Wi-Fi campus on 802.11n with fault tolerance and load balancing (Deployed)
- o Open source Learning Management System - eUniv (Deployed)
- o Implementation of Open source tool for network management system (Planned)
- o Anti-plagiarism system (Deployed)
- o ERP system – Enterprise portal for student/ employees (Partially deployed)
- o Services & parent-services (Planned)
- o Timetable optimizer & smartcard based real-time attendance management system (Planned)
- o Virtual classroom and eUniv (Deployed)

The University plans to increase internet bandwidth to 1 Gbps from 65 mbps for better internet access to the University community. In 2014, the bandwidth was 18 mbps, currently we have 65 Mbps. A committee on ICT policy is working for planning, deploying and upgrading IT infrastructure and associated facilities on campus.

4.3.4 Give details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research.

- o All faculty members provided computing facilities.
- o All classrooms and seminar halls have been provided with projectors as an aid to teaching process.
- o Various online journals are subscribed by YKC and made available.
- o Various Open Source courses are also made available via University Intranet.
- o The University has its own in-house developed software for conducting online tests.
- o The Library services are computerized with web enabled software.

4.3.5 What are the new technologies deployed by the University in enhancing student learning and evaluation during the last four years and how do they meet new/ future challenges?

o The Institution facilitates extensive use of ICT resources including development and use of computer-aided teaching/ learning materials for generating a teaching-learning environment.
o The Institute has Computer Labs equipped with latest Hardware configuration, peripherals (including Printers, Scanners etc.) and latest version of Software to fulfill the academic needs.
o All computers are connected to a central network with Fiber Optic backbone and are accessible from everywhere within the campus.
o The IT lab allows students, faculty to take printouts, browsing and surfing etc.
o The Wi-Fi enabled campus provides 24x7 internet access to students and Faculty.
o All lecture halls are equipped with specialized teaching aids like LCD projectors to enhance the quality of the teaching learning experience.
o All auditoriums are inter connected for live broadcasting of lectures and motivational movies, this facility has been extended to hostels.
o The auditorium and seminar halls are equipped with the latest state of the art audio- video facilities and are used for hosting intra and inter college events like seminars, conferences, panel discussions, talk shows and cultural activities etc.
o Training programs are regularly conducted on software applications, installation of software, upgrading hardware etc.
o Faculty are allowed to download and rehearse lecture presentation.
o Teachers use ICTs for 'routine tasks' (record keeping, lesson plans, information presentation, searches on the Internet etc.).
o Special sound proof e-Studios have been made for faculty to prepare and record interactive lectures.
o Labs are modernized and upgraded to keep pace with the latest technologies. Help of industries has also been taken in this regard.
o Latest IT techniques available in evaluation process have been adopted.
o Implementation of Smart Class Room project.
o Faculty, Students and administrative staff of the University have been provided with Webmail service.
o Revised version of University website with advanced features and updated information about the University is available

- o Online student's feedback system is in place.
- o Online information regarding placement activities available to the students from the Placement Cell in real time.
- o The University has its own ERP portal which helps it in progress towards its aim to become a paperless University.

4.3.6 What are the IT facilities available to individual teachers for effective teaching and quality research?

- o Wi-Fi available 24 x 7 across the campus.
- o Various databases are subscribed by the University to facilitate and promote quality research. These are used by the faculty members to conduct discussion with online and live data display in classrooms.
- o Computerized book circulation facility with smart identity card
- o E-access to library resources on 24x7 basis
- o The University has its own user friendly ERP portal.

4.3.7 Give details of ICT-enabled classrooms/learning spaces available within the University? How are they utilized for enhancing the quality of teaching and learning?

Various schools are equipped with ICT enabled class rooms/ learning spaces. The class rooms equipped with various modern audio-visual training aids facilitate students and the faculty members to render their presentation effectively.

Use of Audio-visual aids has enhanced the quality of learning and supplement the traditional 'chalk-talk' mode of instruction. Each lecture being put on the eUniv portal and this has ensured improvement in the quality of instruction, since teachers are conscious of their on-line presence. This has acted as a great catalyst for teachers to improve on their instruction delivery and hone their presentation skills.

4.3.8 How are the faculty assisted in preparing computer-aided teaching-learning materials? What are the facilities available in the University for such initiatives?

The Institution adopts proactive policies for technology deployment and maintenance. The institution deploys and employs ICTs for a range of activities to facilitate an engaging teaching learning environment:

- o The faculty is encouraged to share content repositories of original content in the KMS Portal.

o They are encouraged to contribute their recorded videos lectures to the open domain to overall contribute to the enhancement of the knowledge bank for wider viewing.
o The Wi-Fi enabled campus provides round the clock internet access to both the students and Faculty.
o Every course is made available online to students from eUniv platform.
o Each lecture hall is equipped with specialized teaching aids like LCD Projectors and Smart boards that enhance the quality of teaching learning experience.
o The auditorium and seminar hall are equipped with the latest state of the art audio/video facilities.
o The library provides access to e-resources to 24x7.
o The Institute has modern computer laboratories with structured optical fiber network for access of information.
o Anti-plagiarism: Imbibes a culture of academic integrity.
o Cloud based services: Provide a future proof scalable, pool of tunable, configurable computing resources to students and faculty.
o For building in redundancy and fault tolerance at the network layer, the following are in place to ensure maximum uptime:
  • Dual ring fiber network
  • Core switch
  • Wireless Controller
  • Unified Threat Management device & firewall
  • Redundant wireless mesh network – will take over in case of multiple fiber cuts to keep campus services running
o Improved bandwidth management – to ensure bandwidth availability to respective user groups
o Improved security, risk management & compliance
o Segregation of campus network into multiple VLANs – assigned dynamically on user authentication.
o Enhanced web content filtering
o Network access Control
o Network Access Protection (checks OS legality, and patch levels prior to letting end point join the network)
o Improved auditing of object access and internet access

4.3.9 How are the computers and their accessories maintained?

The University ensures a three year comprehensive warranty for newly purchased IT related equipment. The University has in house mechanism to

maintain and repair computers, laptops, servers and UPS by the technicians of the Computer Center. The University undertakes maintenance through the IT Cell to provide repair and maintenance services.

4.3.10 Does the University avail of the National Knowledge Network connectivity? If so, what are the services availed of?

The application of the University is pending at NMEICT (National Mission on Education through Information and Communication Technology) for 1 Gbps line (100MBps effective) line. BSNL has already laid fiber to the campus.

4.3.11 Does the University avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?

Since the web resources are openly available, individual faculty and schools use these for academic purposes. The University also encourages its faculty members to update the content on Wikipedia.

4.3.12 Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the University.

Table 4.10 Budget

Planned Budget	Planned Projects/Facilities
• 1.75 Lacs	• Maintenance and Repair
• 12 Lacs	• Video Conferencing
• 8 Lacs	• Full Solution ERP
• 25 Lacs	• Wi-Fi Solution for All Hostels
• 5 Lacs	• Document Management System
• 4 Lacs	• KMS
• 2 Lacs	• Power backup for YKC

4.3.13 What plans have been envisioned for the gradual transfer of teaching and learning from closed University information network to open environment?

- o The University has established smart classrooms and select auditoriums are equipped with in-built video conferencing on real time basis to allow students- faculty access, even from a remote location.

o The University has a eUniv platform through which faculty upload interactive lectures for respective courses. These videos are then made available to students over cloud. In this way, the University plans to progressively move from classroom teaching to an open environment where neither the student nor the faculty are restricted to a location/time.

4.4 Maintenance of Campus Facilities

4.4.1 Does the University have an estate office/ designated officer for overseeing the maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

Director Operations who stays on the campus looks after maintenance of infrastructure and services etc. In addition, there is an Estates Officer who plans and executes infrastructure projects. The following initiatives have been taken recently:

o Free transportation for Hostel students to Solan Market once a week.
o New restaurant opened.
o Printing and Stationery Shop has been opened.
o Speed governors installed in all buses for safety of students.
o Steam cooking installed in the Girls Hostel.
o New Girls Hostel, Vice Chancellor's Residence and Guest Rooms.

4.4.2 How are the infrastructure facilities, services and equipment maintained? Give details.

Maintenance is carried out under the aegis of the Director Operations. In addition, each school has a nominated Logistics Coordinator who is responsible for the upkeep of the classrooms and common facilities. Requests for upkeep are initiated by the Logistics Coordinator and executed by the Director Operations who has the following teams working under him:

o Housekeeping Team.
o Landscaping and Arboriculture Team.
o Electrical Maintenance and Carpentry Team.
o Transport Team.
o Construction, infrastructural maintenance and major repairs are carried out by the Estate Officer.

CRITERION V: STUDENT SUPPORT AND PROGRESSION

Student mentoring and support has been an integral part of University objective. The prime focus of the University is to develop the mental, physical and social aspects of every student to its full potential thus ultimately contributing to national development. Academic and non-academic growth of an individual is monitored at the University and at the school level, using a well-defined mechanism. The various levels of student mentoring and support are designed in such a way that from the time of admission to becoming alumni each individual is supported by a mentor. In order to cater to the needs of each student, the University emphasizes on creating congenial environment for teaching and learning process. Special attention is provided for, women, international students, underprivileged and physical disabled students.

The Vice Chancellor, Deans of faculty, Dean Student Welfare, Dean Resident Students, Head of Schools, Program Coordinators and Mentors participate in activities related to student mentoring and support. Students are encouraged to become a part of University programs and their feedback is obtained to enrich academic and non-academic quotients.

5.1 Student Mentoring and Support

5.1.1 Does the University have a system for student support and mentoring? If yes, what are its structural and functional characteristics?

Yes, the University has a multi-level system for students support and mentoring. The University focuses on overall development of students in holistic way.

Orientation program

This is conducted for all the new students before the formal commencement of classes. The University has three levels of well-defined orientation system as depicted in Fig. 5.1

University Level
- o Introduction to the academic rules and regulations of the University.
- o Issue of Identity cum ERP Smart Cards and explanation on its, multi-purpose usage.
- o Personnel of the Anti-ragging and grievances redressal committees are introduced.

- Dean Student Welfare complimented by Dean Resident students, supports the students in extra-curricular development through NSS, sports, cultural, social and extension activities etc.
- Introduction to hobby clubs.
- Foreign students are provided all the basic facilities and support to adjust in the new environment. They are assigned a faculty as well as a student mentor.
- Meditation and PT classes for physical and mental fitness of the students as a one credit course for B.Tech students.


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┌─────────────────────┐
│ Level-I Entry level │        ┌──────────────────┐
│ support at time of  │───────▶│  Admission Team  │
│ admission           │        └──────────────────┘
└─────────────────────┘                 │
                                         ▼
                        ┌──────────────────────────────┐
                        │  Counseling and motivating    │
                        └──────────────────────────────┘
                                         │
                                         ▼
                        ┌──────────────────────────────────┐
                        │ Choosing the program and the     │
                        │ electives                        │
                        └──────────────────────────────────┘
                                         │
                                         ▼
                        ┌──────────────────────────────┐
                        │      Educational loans        │
                        └──────────────────────────────┘
                                         │
                                         ▼
                 ┌────────────────────────────────────────────┐
                 │ Making student familiar with campus culture │
                 └────────────────────────────────────────────┘

┌─────────────────────┐   ┌──────────────┐   ┌───────────────────────────┐
│ Level-II Post       │──▶│ Program      │──▶│ Support- Mentoring-       │
│ admission support   │   │ Coordinator  │   │ Monitoring of student     │
│                     │   │              │   │ progression               │
└─────────────────────┘   └──────────────┘   └───────────────────────────┘

┌─────────────────────┐   ┌───────────────────────────┐   ┌────────────────────┐
│ Level-III Exit level│──▶│ Placement Coordinator at  │──▶│ Working for        │
│ support             │   │ University and Schools    │   │ student placement  │
│                     │   │ level                     │   │                    │
│                     │   └───────────────────────────┘   └────────────────────┘
│                     │   ┌───────────────────────────┐   ┌────────────────────┐
│                     │──▶│   Alumni Coordinator      │──▶│ Checking alumni    │
│                     │   │                           │   │ progression        │
└─────────────────────┘   └───────────────────────────┘   └────────────────────┘
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Fig. 5.1 Student Support System

School Level

- o Introduction to all faculty members.
- o Administrative staff helps students in registration formalities.
- o The team also provides the day to day information on time table, examinations, guest lectures, special events and holidays etc.
- o A Faculty mentor is assigned to each student. Mentors supervise academic performance and provide psychological support.
- o Mentors also guide the students to take up the research projects and other initiatives like organizing events and participation in extracurricular activities etc.

Hostel Level

- o Introduction to the hostel rules and regulations of the University.
- o Hostel students are also provided all support by the wardens to adjust to the new environment.

Placement and Career Development Cell

This has been established in the University where students get guidance on job opportunities. The following are ensured.

- o **Placement drives: Facilitates '**on campus' placements.
- o **Placement opportunities**: The students are offered placement opportunities for two years after their completion of the degree.
- o **Alumni Association**: Continue to interact with students.

Health Care

There is a well-equipped health center with two full time doctors, to provide the basic health care services. Apart from health care services, doctors have been counseling students on physical and mental fitness. The Lady Doctor is part of the counseling cell to address the social and psychological aspects.

5.1.2 Apart from classroom interaction, what are the provisions available for academic mentoring?

Apart from interactions in the classrooms, academic development of the students is enriched through the following initiatives:

- o Frequent interactions with the faculty and industry mentors by which students get the opportunity to share their academic and research interests, seek help and guidance on areas of academic concerns and selection of electives/ specialization etc.
- o Interaction with 'external' industry and academic experts.

- o Industrial visits and educational tours.
- o Participation in workshops, seminars and conferences.
- o Internship and student exchange program.
- o The Shoolini Study Circle is a common platform for every student to known about competitive examination and discussion etc.

5.1.3 Does the University have any personal enhancement and development schemes such as career counselling, soft skill development, career-path-identification, and orientation to wellbeing for its students? Give details of such schemes.
- o **Placement & Career Development Cell:** This offers career guidance and counseling on ongoing basis. *(Refer to point 5.1).*
- o **Personality Development:** Personality and Soft Skill Developments is covered during SPRINT programs.
- o **Student Wellbeing:** The University also conducts yoga and meditation classes and invites renowned academicians/industrialists/trainers for workshops etc.
- o **ABHIRUCHI:** This is the overall body responsible for the efficient running of the six hobby clubs.

5.1.4 Does the University provide assistance to students for obtaining educational loans from banks and other financial institutions?

Yes, the University provides assistance by providing pamphlets, along with prospectus enumerating the procedure for obtaining loans. On admission, the University issues the certificate of tuition fee charged. This helps students for sanctioning of loans by the Banks, even in their native areas. Whenever there is some problem in sanctioning of loans, student's approach the Deans Committee, who takes up the matter with the concerned bank.

5.1.5 Does the University publish its updated prospectus and handbook annually? If yes, what are the main issues/ activities/ information included/ provided to students through these documents? Is there a provision for online access?

The University publishes its prospectus and information brochure every academic year. This provides detailed information about the University, courses offered, along with eligibility criteria and modes of admission, fee details, research programs, profiles of teachers, hostel facilities, transportation, rules and regulations, scholarships, research and sporting infrastructure, placements, skill enhancement programs and student oriented clubs and societies. Also includes the evaluation system followed including evaluation and attendance. The University also provides a

handbook whereby important rules and regulations regarding academics, examination, hostels, annual schedule and contact details etc. are given.

5.1.6 **Specify the type and number of University scholarships/ freeships given to the students during the last four years. Was financial aid given to them on time? Give details (in a tabular form) for the following categories: UG/PG/M.Phil. /Ph.D./Diploma/others (please specify).**

There are a number of scholarships/free ships and aid provided to students. Details are tabulated for perusal:

Table 5.1 Scholarships/freeships and aid provided in 2014-2015.

Sr. No.	Type of Scholarship	Amount	No. of students
1.	Single Girl Child	Equivalent to 10% of Tuition Fee/ year	UG (6) PG(8)
2.	Sibling Scholarship	Equivalent to 10% of Tuition Fee/ year	UG (36) PG(8)
3.	Single Parent (Mother) Child	Equivalent to 20% of Tuition Fee/ year	UG (10) PG(1)
4.	Merit Scholarship for UG based on Class XII Board exams and PG	Equivalent to 10%/20% of Tuition Fee/ year Equivalent to 75% of Tuition Fee/ year	UG (44) PG(18)
5.	Merit-cum-Means Scholarship(20 Numbers)	On the discretion of the Management	UG (17) PG(9) M.Phil./Ph.D. (08)
6.	Shoolini University Merit Scholarship	Rs.2000/- in each course for First Rank Holders in Semester	UG (11) PG(4)
7.	BPL Scholarship	100% tuition fee wavier	UG (09) PG(02)
8.	Old Student Scholarship	Equivalent to 10% of Tuition Fee/ year	PG(15)
9.	Students holding INSPIRE of Rajiv Gandhi Fellowships or any other similar fellowships	Equivalent to 50% of Tuition Fee/ year	M.Phil/Ph.D (03)
Total Students (UG: Under Graduate; PG: Post Graduate)			**209**

Table 5.2 Scholarships/freeships and aid provided 2011-2014.

Sr. No.	Type of Scholarship	Amount	No. of students		
			2011-2012	2012-2013	2013-2014
1.	Single Girl Child / Siblings Scholarship / Single Parent/ Kashmiri Migrants/ Internal Students / Merit Scholarship for	20% tuition fee waiver	UG (38) PG(27) M.Phil./ Ph.D. (04)	UG (102) PG(78)M .Phil./Ph .D. (09)	UG (105) PG(64)M.Phi l./Ph.D . (25)
2.	Special Case (on discretion of mngment)	5% to 95% tuition fee waiver	UG (40) PG(28) M.Phil/P h.D (04)	UG (59) PG(40)M .Phil/Ph D (34)	UG (56) PG(23)M.Phi l/Ph.D
3.	Shoolini University Merit Scholarship	Rs.2000/- in each course for First Rank Holders	UG (04) PG(01)	UG (34) PG(33)	UG (31) PG(18)
4.	BPL Scholarship	100% tuition fee waiver	UG (06)	UG (06) PG(01)	NA
5.	Free Hostel facility for Inspire	100% Hostel fee waiver	NA	UG (08)	UG (20)
6.	GPAT Qualifier	50000-600000/	PG(0+0 4)	PG(0+03)	PG (02+01
7.	JRF qualified / Inspire Scholarship/ DST	100% tuition fee wavier	Ph.D (01)	Ph.D (01)	Ph.D (01)
8.	Rajeev Gandhi Fellowship	200000	NA	Ph.D (01)	NA
9.	DRDO Project Member	99000	NA	Ph.D (01)	Ph.D (01)
Total Students(UG: Under Graduate; PG: Post Graduate)			**157**	**410**	**367**

5.1.7 **What percentage of students receive financial assistance from state government, central government and other national agencies (Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)?**

Two percent of students receive financial assistance from state government, central government and other national agencies like INSPIRE, Rajeev Gandhi Fellowship and DRDO etc.

5.1.8 **Does the University have an International Student Cell to attract foreign students and cater to their needs?**

Yes, in keeping with the stated mission the Shoolini University has a dedicated Office of International Affairs. This office is mandated to plan campaigns to promote the University as a Premier Center of Higher Learning and Research, and by so doing, attract foreign students to join. In keeping with the aim, the University is in the process of making an 'exclusive' International Student's Hostel with facilities of global standards. The theme followed is enunciated below:

- o Offer world class learning and research facilities.
- o Highlighting the low fee structure, offering foreign students an opportunity to pursue 'quality' education at an 'affordable' cost.
- o Offering foreign students, especially from South and East Asia, an opportunity to hone their English language skills.

5.1.9 **Does the University provide assistance to students for obtaining educational loans from banks and other financial institutions?**
As enumerated in the reply to point no. 5.1.4 above.

5.1.10 **What types of support services are available for:**

Overseas students-
Overseas students are provided with**:**
- o Hostel facility of International standards,
- o A special course for speaking and writing English. The University is working on obtaining international recognition of the course.
- o Cultural activities – showcasing the diversity and heritage of India.
- o Mentor student is made available to help for local hospitality
- o Conducted tours and Airport pick-ups.

Physically challenged / differently-abled students:

Yes, The University offers a number of student support services. These include information support, financial support, special hostel

accommodation, career guidance and counseling through mentors to physically challenged students. Apart from that University has taken a conscious decision to upgrade facilities for the disabled/differently abled *(Please refer to point 4.1.5).*

SC/ST, OBC and economically weaker sections: The minorities' officer looks after the issues related to minorities' students and look for their wellbeing and overall development.

SC/ST: Relaxation in age is provided and seats are reserved as per the rules and regulations of the Government of Himachal Pradesh.

OBC: As per the policy of the Government of HP.

Women: Scholarships are provided to single girl child.

Economically weaker sections: Freeship to BPL students as per the policy.

Persons with varied disabilities: As per the HP rules and regulations.

Outstanding achievers in sports and other extracurricular activities: Weightage up to 5% marks in qualifying examinations for admissions

Students participating in various competitions/conferences in India and abroad:

As part of their extra-curriculum and/or academic development, students are encouraged to participate in various competitions, conferences and seminars, both in India and abroad. In that, students including research scholars are fully/partially supported with financial assistance by the University. Students have been given financial support by Shoolini University/DST and DBT funding. *(For Details See Schools Reports)*

Health Center, Health Insurance etc.

The University is cognizant of its responsibilities. The following are enumerated:

- o University has a well-equipped health center for providing medical aid and this facility is also extended to the nearby villagers. The center is manned by two experienced full time doctors (including a lady doctor), one pharmacist, one lab technician and one staff nurse.
- o The Health center also provides clinical facilities.
- o The University has two ambulances for evacuation and/ or sending hostel students and campus staff either to Solan or Other hospitials.
- o Students and staff are covered under health insurance.

Skill development (spoken English, computer literacy, etc.):

Skill development is an important part of informal and/or 'out of classroom' learning. In keeping with the aim to impart quality 'well rounded' education to its students, the following initiatives have been taken:

- o Training in Personal and Interpersonal communication skills imparted as part of the SPRINT program.
- o Language and Spoken English Lab. This facility has been created to promote 'self-learning,' and is over and above formal language classes to prepare them for tests like ILETS, TOEFL etc.
- o The Language lab provides self-learning of foreign languages.
- o Computer labs are available in all Schools and in the library.
- o Research projects undertaken by students at UG and PG levels.

Performance enhancement for slow learners:

- o Faculty members and mentors help slow learners through tutorials.
- o Special attention in skill enhancement and personality grooming to build their confidence level is provided during SPRINT program.
- o Students trained in communication skills.

Exposure of students to other institutions of higher learning/ corporates/business houses, etc.:

As part of the curriculum, it is mandatory to provide first hand exposure to students in industries and research institutes of national and international repute. Students of this University visit industries, research institutes and even foreign countries for industrial exposure, projects, internships etc.

Publication of Student Magazines

'LAMPS' a student driven newsletter of the School of Business Management was launched on 20th October, 2010. It provides a platform for students to disseminate information pertaining to the activities of school. 'LAMPS' has recently been upgraded to the status of a magazine.
Shoolini University is in the process to launch a student scientific magazine named "Shoolini Scholar" with the theme being 'By the students and for the people'.

5.1.11 Does the University provide guidance and/or conduct coaching classes for students appearing for Civil Services, Defense Services, NET/SET and any other competitive examinations? If yes, what is the outcome?

The University offers coaching classes for NET/SET, GATE and GPAT and guidance is provided for competitive examinations. Being a recent

initiative, this is likely to show results in the coming years. Having said that, the following steps have been taken in this regard:

- o **Curriculum**: It is designed to meet requirements of NET/SET/GATE/GPAT and other competitive examinations.
- o **Coaching classes**: Coaching classes for NET examination and other competitive tests like banking and insurance etc. are conducted. 10-12 students cleared NET examination, 10 and 5 qualified for GATE and GPAT respectively.
- o **Value added Courses**: Current Affairs, General Awareness and Aptitude Development have been incorporated in the curriculum of some programs like MBA, B. Com (Hons), BBA and B. Tech.
- o **Online study material**: Course material is thereafter put on the University net for wider circulation.
- o **Coaching for Defence Services**: The job undertaken by a team of retired Army Officers; one of whom is a qualified Group Task Officer of the Services Selection Board.

5.1.12 Mention the policies of the University for enhancing student participation in sports and extracurricular activities through strategies / schemes such as:

Additional academic support and academic flexibility in examinations:

In order to create interest among students towards sports, the University has created a 'state-of-art' sports facilities and this has become an intrinsic part of its milieu. It has facilities like table tennis, badminton, gymnasium etc. In addition, the boys and girls hostel also have facilities for indoor games. The pine court has facility for basketball, volley ball, cricket (net practice), while a lawn tennis court is planned.

In order to enhance student participation, two schemes are in force:

- o Students participating in sports competition at the University and inter-University level are given relaxation in attendance to the tune of 5 per cent.
- o Students excelling in sports and extracurricular activities are given weightage of 5% marks in admission to a particular program.

Special dietary requirements, sports uniform and materials:

Special diet is given to deserving sports persons on a case to case basis. Where required, sports kit is also provided to encourage participation. Outstanding sportspersons are given fees concession as per rules.

Any other:

Taking advantage of being located in the Himalayas, mountaineering and trekking camps are conducted as a part of outdoor adventure training. The University is aware of the benefits of outdoor training for the overall development of students, and hence encourages outdoor activities.

5.1.13 Does the University have an institutionalized mechanism for students' placement? What are the services provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?

Shoolini University has a dedicated placement cell headed by Director and is assisted by two Assistant Directors. The Placement cell structure is composed of the Campus, Corporate office and Student team.

These teams are basically involved in four major functions:
1. Identifying Job Opportunities.
2. Interactive sessions with Industry Professionals
3. Facilitate and organize Industrial Visits.

5.1.14 Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).

Table 5.3 The number of students selected during campus interviews by different employers in last four years:

Year	2012	2013	2014	2015
No. of Companies Visited	32	42	103	107
No. of Students Placed				
Management	45	53	67	92
Engineering	NA	18	69	101
Pharmaceutical and Basic Sciences	17	21	28	20
Biotechnology	15	08	50	52
Total students	**77**	**100**	**214**	**265**

(Note: Science students prefer to undertake Research over Placement)

5.1.15 Does the University have a registered Alumni Association? If yes, what are its activities and contributions to the development of the University?

Shoolini Alumni Association was constituted to create a platform for students who have passed out to join hands with the University to support its vision and contribute by working together. Though the platform has still to meet its objectives, since the University is still new and its alumni still at junior levels. Objectives kept in mind before the constitution of Alumni Association are given; these are likely to show results in subsequent years:

- o To maintain a comprehensive database of Shoolini Alumni.
- o To identify and promote alumni achievements and enhance the credibility and reputation of the University.
- o To keep the Alumni involved with the University through interaction programs, events and assist in placements.
- o To keep the Alumni engaged with the University through Social Media which helps in strengthening the association.
- o To engage them in Social activities which contribute towards the development of society and nation as well.

5.1.16 Does the University have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?

Yes, the University has a central grievance redressal cell which deals with issues of academic nature, registration, examination, amenities and services in the hostels etc. Generally grievances are resolved/mitigated at different levels, though most get resolved at the school level. In addition, students can convey their grievance(s) by mail which is acted upon by the Central Cell. All mails are responded to and a reply provided to the concerned person, though their identity id kept confidential.

5.1.17 Does the University promote a gender-sensitive environment by (i) conducting gender related programs (ii) establishing a cell and mechanism to deal with issues related to sexual harassment? Give details.

The University promotes a gender sensitive environment. In that, the following are in place:

- o Conducting gender related lectures by counsellors on sexual harassment and its prevention.
- o Creation of a cell to deal with issues related to sexual harassment.
- o A Sexual Harassment Prevention Committee is in place as per the direction of the Hon'ble Supreme Court.

5.1.18 Is there an anti-ragging committee? How many instances, if any, have been reported during the last four years and what action has been taken in these cases?

The University has a well-defined anti-ragging committee. Since, the monitoring system is strong, no serious ragging case has been reported during the last four years. Notwithstanding, the following initiatives have been taken to provide a congenial stay at the campus:

- o Dean, Resident Students, who resides on the campus is deputed to keep a check on the students' activities and cater to their needs.
- o Dean Student Welfare takes care of all the students welfare activities including prevention of ragging
- o Frequent visits of the Vice-Chancellor and Deans to the hostels and campus rounds.
- o Check on ragging activities by the hostel wardens.
- o Check by the program coordinators at school level.
- o Anti-Ragging campaigns by the students through videos/posters etc.
- o Declaration by each student against indulging in ragging activities.
- o Awareness about Anti-Ragging Committee and punishment rules for indulging in ragging, during the orientation program.

5.1.19 How does the University elicit the cooperation of all its stakeholders to ensure the overall development of its students?

As a policy, the University maintains close contact with all stakeholders, namely, the industry, parents, alumnae, students and the community and solicits their recommendations –both formally and informally, with the aim of adding value and enriching the overall development of students.

Apart from the Regulatory/Advisory Bodies, stake holders include visiting dignitaries, members of the industry, alumni, parents and students are requested for their feedback and suggestions. Observations and/or recommendations are duly considered by the management and depending on their nature, are included in curricula (approval of Board of Studies) or incorporated/implemented in the day to day functioning of the University.

5.1.20 How does the University ensure participation of women students in intra and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.

- o The University ensures adequate funds are made available to support women's students' activities.

- o International women's day is celebrated by conducting cultural activities and competitions and by inviting distinguished women to deliver inspiring lectures.
- o Women are encouraged to participate in sports for which facilities are available such as Badminton, Table Tennis, Basket Ball, Volley ball, Gym, adventure camp etc.
- o Separate fitness center is established for women students.
- o Large number of women students' participate in the University Athletic meet.
- o They are also encouraged to participate in all cultural activities.

5.2   Student Progression

5.2.1   What is the student strength of the University for the current academic year? Analyse the Program-wise data and provide the trends for the last four years.

The overall student strength of University is 2618. The current academic year student strength is 849. The student progression details are given below: *(Please refer to Schools reports)*

- o **School of Electrical and Computer Science Engineering:** UG to PG Student Progression 15.00%
- o **School of Mechanical and Civil Engineering:** UG to PG Student Progression 10.00%
- o **School of Pharmaceutical Sciences:** UG to PG Student Progression 10.00 % and PG to Ph.D Student Progression 5.00%
- o **School of Business Management Sciences and Liberal Arts:** UG to PG Student Progression 38%
- o **School of Physics and Material Sciences:** PG to Ph.D Student Progression 9.00%
- o **School of Chemistry:** PG to M.Phil Student Progression 24.59% and PG to Ph.D Student Progression 48.27%
- o **School of Biological and Environmental Sciences:** PG to M.Phil Student Progression 25% PG to Ph.D Student Progression 10.00%
- o **School of Biotechnology,** PG to M.Phil Student Progression 5.00% and PG to Ph.D Student Progression 5.00%
- o **School of Bioengineering and Food Technology:** UG to PG Student Progression 10.00% , and PG to Ph.D Student Progression 5.00%

Note: Percentage of student progression = no. of students admitted to higher degree from lower degree/ total class strength of higher degree the student is admitted to*100

5.2.2 **What is the program-wise completion rate during the time span stipulated by the University?**

Table 5.4--Program-wise completion rate

| Completed Program | Percentage of students completed within the time frame | | | | |
| | Faculty | | | | |
	Applied Sciences & Biotechnology	Basic Science	Management Sciences & Liberal Arts	Pharmaceutical Sciences	Engineering & Technology
U.G	NA	NA	92%	93%	88%
P.G	95%	99%	94%	96%	100%
M.Phil.	94%	97%	NA	NA	NA
Ph.D.	72%	69%	17%	50%	NA

(Details are given in school's reports)

5.2.3 **What is the number and percentage of students who appeared/ qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, GATE/ CAT/ GRE/ TOEFL/ GMAT / Central / State services, Defense, Civil Services, etc.?**

Table 5.5 Number of students who qualified in competitive examinations

Sr. No.	Name of competitive examinations/ Fellowships	Number of students qualified
1.	UGC- NET/SLET /JRF/ICAR	10
2.	ARS- NET	03
3.	UGC- Rajiv Gandhi/Mulana Azad Fellowship	04
4.	DST - INSPIRE	03
5.	GATE	10

Sr. No.	Name of competitive examinations/ Fellowships	Number of students qualified
6.	GRE	01
7.	TOEFL	01
8.	Central/State Services	22
9.	GPAT	11

(Details given in school's reports)

5.2.4 Provide category-wise details regarding the number of Ph.D./ D.Litt./D.Sc. thesis submitted/ accepted/ resubmitted/ rejected in the last four years.

The details regarding the number of Ph.D. thesis submitted/ accepted/ resubmitted/ rejected in the last four years is as follows:

2011-12: No thesis has been submitted/ accepted/ resubmitted/ rejected.
2012-13: 1 Ph.D. thesis submitted, 1 accepted and none resubmitted nor Rejected.
2013-14: 12 Ph.D. thesis submitted, 12 accepted and none resubmitted nor Rejected.
2014-15: 30 Ph.D. thesis submitted, 22 accepted and none resubmitted nor Rejected.

5.3   Student Participation and Activities

5.3.1 List the range of sports, cultural and extracurricular activities available to students. Furnish the program calendar and provide details of students' participation.

Table 5.6 List of sports, cultural and extracurricular activities available to students are as follows:

Sports Activities	Cultural Activities	Extracurricular Activities
Badminton	SPRINT Cultural Programs	Biz Quiz
Table Tennis	Dramebaaz (Theater)	Guru Series
Basket Ball	Bawle Bawarchi (Cooking)	Blood Donation

Sports Activities	Cultural Activities	Extracurricular Activities
Chess	Satrangi Strokes	Women's Day
Carom	Raangrang (Singing & Dancing)	World Earth Day
Boxing	Moksh (2013 &2014)	Swach Bharat Abhiyan
Cricket	INSPIRE Cultural Programs	World Earth Day
Volley Ball	-	Eco Club
Gymnasium	-	Shutterbugs (Photography)
-	-	Hiking & Trekking
-	-	Samarthya (Entrepreneur Club)

Table 5.7 Calendar of Sports, cultural and extracurricular activities

Sr. No	Event	Date & Month	Year
1	Badminton, Carom, Chess and Table Tennis	27th& 28th August	2012
2	Basket Ball	14th& 15th November	2012
3	Cricket	9th& 10th April	2012
4	Marathon	5th Sep	2012
5	Biz Quiz	30 Oct	2012
6	Badminton, Carom, Chess and Table Tennis	25th& 26th August	2013
7	Basket Ball	14th& 15th November	2013
8	Cricket	12th 13th April	2013

Sr. No	Event	Date & Month	Year
9	Athletic Meet	17th & 18th October	2013
10	Marathon	5th Sep	2013
11	Declamation & Painting Competition	8th October	2013
12	Biz Quiz	30 Oct	2013
13	Badminton, Carom, Chess and Table Tennis	22th & 23th August	2014
14	Basket Ball	14th & 15th November	2014
15	Cricket	5th & 6th April	2014
16	Marathon	5th Sep	2014
17	Blood Donation Camp	12 March	2014
18	Declamation & Painting Competition	14th Oct	2014
19	Moksh	12th 13th May	2014
20	Swach Bharat Abhiyan	2nd Oct	2014
21	Biz Quiz	17 Sept	2014
22	Swaranjali	13th & 14th Oct	2014
23	Theatre Work Shop	10th Dec	2014
24	Women's Day Celebration	7th March	2014
25	Work Shop on Goal Setting	24th Nov	2014
26	Baawle Bawarchi (Masterchef club) Launch Event	9th Dec	2014
27	Samrthya	15 Dec	2014
28	Moksh	7th 8th May	2015
29	National Sanitation & Awareness Day	19th March	2015
30	Dramebaaz Launch Event	2nd March	2015
31	Workshop on Motivation	5th May	2015
32	Hiking & Trekking club Launch Event	20th March	2015
33	Hiking Expedition	11th to 14th May	2015

5.3.2 Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels: University/ State/ Zonal/ National/ International, etc. during the last four years.

Table 5.8 Participation and Achievement in Sports, extracurricular and cultural activities by students is tabulated:

Sr. No	Event	Place	Achievement	Year
1	Table Tennis	Chitkara University	2nd Runner Up	2011-2012
2	Open State level Indoor Cricket Championship	Chitkara University	Winner	2012-2013
3	Basket Ball	Chitkara University	2nd Runner up	2012-2013
4	Badminton	Chitkara University	2nd Runner up (Girl)	2012-2013
5	Table Tennis	Jay Pee University	Winner	2013-2014
6	Volley Ball	Jay Pee University	1st Runner Up	2013-2014
7	Badminton	Jay Pee University	Winner	2013-2014
8	Table Tennis	Baddi University	1st Position	2013-2014
9	Badminton (Girls)	Baddi University	3rd Position	2013-2014
10	GD + Press	Baddi University	3rd Position	2013-2014
11	Group Dance	Baddi University	1st Position	2013-2014
12	Table Tennis	Jay Pee University	Winner	2014-2015
13	Volley Ball	Jay Pee University	Winner	2014-2015
14	Badminton	Jay Pee University	Runner Up	2014-2015
15	Classic Solo	Chandigarh University	1st Position	2014-2015
16	Modelling	Chandigarh University	3rd Position	2014-2015
17	Photography	Chandigarh University	1st Position	2014-2015

5.3.3 Does the University conduct special drives/ campaigns for students to promote heritage consciousness?

The University through its special initiative 'Jagran' has initiated the following to promote heritage consciousness:

- o Regular classes of Yoga and Meditation for undergraduate students.
- o Excursion trips of students to heritage places such as "Chail Palace, Advance Studies, Shimla,Yogada Dhayan Mandir, Shimla
- o Oraganised a seven day workshop on the 'Bhagwad Gita.'
- o Guest lectures on Self upliftment, Self-awareness and meditation.
- o The University has plans to set up 'Yogananda Ville' to create a global institute of Kriya Yoga research and for spiritual pursuits.
- o Jagran is organized every year by the University students.
- o A three days retreat in June, 2015.

5.3.4 How does the University involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/ materials brought out by the students during the last four academic sessions.

'LAMPS' a student driven newsletter of the School of Business Management was launched on 20th October, 2010.

Shoolini University has initiated steps to start a student scientific magazine named 'Shoolini Scholar' which is 'By the students and for the people.'*(For details please see point 5.1.10)*

5.3.5 Does the University have a Student Council or any other similar body? Give details on its constitution, activities and funding.

- o The University follows the student participative system where in Class Representatives are democratically selected. Nominated students from each class become their representative for all University activities.
- o Class Representatives meet their Deans to discuss issues related to Academics, Infrastructure, grievances, examinations etc.
- o At the University level there is a Dean Student Welfare who looks after problems of students in conjunction with the management.
- o Dean Resident Student attends to all problems in Hostels.
- o Besides this, there are information Societies and Clubs in which the role of the Class representative is of a facilitator.

Funding for students representatives is provided by the University for Extracurricular Activities. For activities like Moksh etc., the University contributes 75% while the remaining funds are collected by students.

5.3.6 **Give details of various academic and administrative bodies that have student representatives on them. Also provide details of their activities.**

Student representatives constitute vital component of following bodies:

Students Placement Committee:
- o Final year students of their degree program participate in the placement related activities, such as publication of placement brochures, to contact different cos.
- o During placement interviews the show is wholly managed by the Students Committee, under the overall supervision of Director Placements and his team who monitor and guide activities.

Alumni Association: The Alumni Association comprising of final year students along with the alumni representatives who have passed out of the University is looked after by the Dean Students Welfare and his team.

Internal Quality Assurance Cell (IQAC): The IQAC was established in December, 2014. Two students representatives included as members who participate in reviewing of programs and policies of the University.

Hostels: There is a Hostel Committee with participation of students to look after activities related to boarding and lodging in the Hostels of the University. Student representatives act as Perfects of the Hostels.

Discipline Committee: Students committees are formed to help organize and maintain the discipline during major extra-curriculum or administrative functions. Formed during functions and for particular activities.

Library Advisory Committee: Students representatives are included as members of the Committee, who participate in the functioning and up keeping of library.

Sports Committee: Student representatives have been included as members of the Sports Committee, they actively participate in sport activity managements and organization of various sports activities.

Any other information regarding Student Support and Progression which the University would like to include:

Abhiruchi the cultural club of Shoolini is a dedicated effort to keep the students engaged in their areas of interest. Clubs like Raagrang (Music) Draamebaaz (theater) Samarthya (entrepreneurship) BaawleBawarchi (cooking) hiking and trekking hold workshops and events on a regular basis.

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CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

Shoolini University is distinct from other similar institutions as its foundation is sponsored by an academician who along with other intellectuals established it with the aim to impart quality education and adopted a holistic approach to research themed around the economics, biodiversity and sustainability of the Himalayas.

With the aim of the upliftment of the youth of the region, the management is committed to merge the rural youth with the mainstream seamlessly.

What makes this experiment unique is that firstly it is truly a 'not for profit' organization and its sponsors are enthused with this academic mission.

6.1   Institutional Vision and Leadership

6.1.1   State the vision and the mission of the University.

Shoolini University has a clearly articulated vision: 'To be a top 200 global University by 2022.' The Mission that flows from the vision is enunciated in 1.1.1.

6.1.2   Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future, etc.?

- o Being a research driven University, it aspires to provide quality environs to its students. It focuses on improving the threshold levels in terms of their employability.
- o Since the University focuses on research endemic to the Himalayan region, it promotes intellectual learning on issues that are peculiar to the region.
- o The University is cognizant of the requirements of the industry and its obligations to society. It promotes both facets by incorporating the essentials in its curricula and extension activities.
- o By aspiring to be a Top 200 Global University by the year 2022, the University has set its own timeline and benchmarks - this distinguishes the institution from others, especially amongst the private universities in the country.

6.1.3 How is the leadership involved in ensuring the organization's management system development, implementation and continuous improvement?

Though the University is young in terms of years, its mission is the major driving force. Having carried out an in-depth assessment of the ranking parameters and extrapolated this with SWOC analysis, the focus areas for the University emerge –generate patentable technologies and foster close interaction with the industry and society for transfer of technology.

In view of the above, the management ensures growth orientated action plan(s) – both in terms of tangibles and intangibles. By having a blend of experienced academicians and experts from the industry, the management, with active backing of the trustees, strives for continuous improvement. The Vice Chancellor, who is also one of the sponsors of the University, is the epitome of commitment and this rubs off on the management and faculty.

This is evident from the fact that in a short period of time, the University has made significant inroads. This has helped in attracting quality faculty from India and abroad. Cumulatively, this has raised the threshold level of the University and imparted fillip to fulfillment of its time-bound mission.

In interacting with its stakeholders:

Leadership, through the management is highly approachable to all stakeholders. By encouraging a decentralized system of leadership, focus is maintained on academics and management, as there is continuous/regular interaction with the stakeholders, enabling prompt action/redressal as enumerated under:

Table 6.1 Interaction with Stakeholders

Stake-holders	Purpose of Interaction
Students and Parents	• Students feedback on the University's functioning and academics is taken in each semester. • Feedback given consideration in performance appraisals. • Suggestions and feedback from parents is also sought during their visits to the campus and given due weightage.
Alumni	• Alumni support the University through feedback on curriculum and industrial visits/trainings • Formal and informal interactive sessions on various forums like SPRINT, Guru Series and Alumni Meets are organized to encourage and motivate current students.

Stake-holders	Purpose of Interaction
Society	• The University is highly cognizant of its civic responsibilities and encourages formal and informal interaction for community development through various extension activities.
Recruiters	• Recruiters' feedback incorporated for development of the outcome driven and skill based curriculum to ensure better employability.
Industry	• University encourages interactions and industry tie ups. • Industry experts have been included in Board of Studies. • Frequent visits of the industry experts to the campus for guest lectures are organized to update students with the dynamics of corporate world. • Industrial visits for students and faculty are encouraged to expose them to the practical work environment. • Impact of strong industry links can be witnessed through the University excellent placement record.
Faculty and Staff	• Online feedback from faculty and staff is collected and well incorporated in the future plans for improvement of the University functioning. • Feedback on faculty and staff development needs is also sought at the time of Annual Appraisal and given due consideration.

In reinforcing a culture of excellence

Striving for excellence is a continuous effort and is visible in how the University and its students have shaped up so far; the motivation again flowing from the vision and mission statement. By following a system of mentorship and delegation of leadership responsibilities, all macro and micro issues are addressed, assisting in the University's quest for excellence.

- o Academic excellence is ensured through feedback from faculty, Board of Studies, students, recruiters and alumni.
- o Since the bar is set high, research scholars are encouraged to interact with fellow researchers and faculty globally, and to submit papers in Scopus and Thomson & Reuter journals. Each thesis is reviewed by an expert from foreign countries, with preference from the USA and Europe. This has raised the quality of research manifold.

- Faculty and students are not just encouraged to participate in national and international conferences/workshops/seminars but student and faculty exchange programs have also been initiated.
- The Knowledge Center of the University has been made a world class facility for enhancing knowledge and providing seamless information for enriching their study/research.

In identifying organizational needs and striving to fulfill them

Since organizational needs are clearly articulated, striving for excellence is the driver in the progression of the University as evident from the following:

- Development of curriculum to global standards and ensuring it is relevant to the stakeholders. The University plans NBA approval for its programs to ensure compliance with the Washington Accord.
- Creating a conducive environment for intellectual growth.
- Incorporation of feedback for progressive improvement.
- Providing national and international exposure.
- Extension of knowledge and know-how to the neighborhood.
- Focus of research on Himalayan sustainability

6.1.4 Were any of the top leadership positions of the University vacant for more than a year? If so, state the reasons. No.

6.1.5 Does the University ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?

Yes, the University ensures that all positions in various statutory bodies are filled in time. Details of meetings are given below:

Table 6.2 Statutory Bodies and Meetings Held

S. No.	Name of body	Frequency of meetings	Meetings Held (last 4 Years)
1.	Governing Body	Once in 4 months	12
2.	Board of Management	Once in 2 months	22
3.	Academic Council	Need Based	30
4.	Finance Committee	Once in 4 months	11
5.	Planning Board	Need Based	3
6.	Alumni Relation Committee	Need Based	1
7.	University Development Committee	Need Based	6

6.1.6 Does the University promote a culture of participative management? If yes, indicate the levels of participative management.

Shoolini University upholds the philosophy of participative management and ensures that every stakeholder works in a culture of achieving team goals and a sense of self responsibility. Though the leadership may appear to be top down, functionally it is participative at all levels. All stakeholders of the University viz. students, alumni, management, teachers and administration are deeply involved in different activities under the supervision of various statutory/functional authorities. The governing body and the Board of Management are prime administrative bodies headed by the Chancellor and Vice-Chancellor respectively. Similarly, the Academic Council, chaired by the Vice-Chancellor, is constituted of all Deans, Head of the Schools, Professors and limited Associate Professors and Assistant Professors, along with outside academic experts. Likewise, the Joint Extension and Research Development Committees, Planning Board are represented by all Deans and Directors of the University thus providing a participative platform for promoting teaching, research and extension.

6.1.7 Give details of the academic and administrative leadership provided by the University to its affiliated colleges and the support and encouragement given to them to become autonomous. Not Applicable

6.1.8 Have any provisions been incorporated/ introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges? Not Applicable

6.1.9 How does the University groom leadership at various levels? Give details.

Grooming of future leaders is an ongoing process and this takes place at multiple planes:
- o Each teaching and non-teaching member is progressively groomed for taking on additional responsibilities.
- o A system of 'mentorship' has been established and helps groom leaders to take on additional responsibilities.
- o In order to derive the best from the management, the top level comprises of seasoned experts who are willing to enrich the cause of the University through their experience. The cutting edge in the teaching faculty comprises of scholars who have either been educated abroad or are Indian Ph.D's.

- o The University makes special efforts to groom its own students and faculty to take up research and teaching assignments, through 'in-house' and/ or specialist training and providing sabbatical leave.
- o The University carries out stringent appraisal annually. There is a well-established system of compensation and awards to encourage achievers and act as motivation for others to strive for excellence.

6.1.10 Has the University evolved a knowledge management strategy? If yes, give details.

Being a Research driven University, the Knowledge Management Strategy of the University is in keeping with the overall mission: to provide 'maximum exposure' to learning resources and provide the means to extrapolate information/ data to arrive at tangible results/conclusions.

The Knowledge Management System (KMS) of the University is being developed in keeping with this aim. The Yogananda Knowledge Center acts as a catalyst and provides means for research and advanced learning. Leveraging technology, the KMS is an ever expanding virtual repository, through which students can find open source papers, books, articles, references, Tedex Talks as well as thesis and dissertations submitted by the University. Since the KMS is a new initiative, it is expected to add value to research in the years to come. In addition, lectures and supplement learning resources are also available through the eUniv portal.

6.1.11 How are the following values reflected in functioning of the University?

Contributing to National Development

The very aim of the University, i.e. 'to provide quality education and promote all round development of students,' contributes to National Development. The technological packages developed helps the Himalayan economy at the macro, micro and societal levels. Being located at the gateway of the Indo-Gangetic plains, this has a salutary effect not only on the immediate region, but beyond it.

Apart from this, the University contributes to society and through it the nation by the following ways:
- o Development of quality human resource.
- o Application of Biotechnology for remediation of the Himalayas, its application in agriculture, horticulture, forestry and pharmaceutical industries.
- o Promoting the eco economy through education and assistance.
- o By promoting small scale/ home based agro-based industry.

- Participating in social causes like blood donation, cleanliness, drive against the prevalent social evils etc.
- Encouraging faculty to undertake research projects on relevant issues and technology transfer pertaining to the Himalayan region.

Fostering Global Competencies among students

In keeping with the aspirations of the University, the University follows curricula of global standards. In addition, the University has various alliances with foreign universities for exchange program. In specific, the following are ensured to foster global competencies:

- Ph.D. thesis are scrutinized by a foreign expert to ensure global standards.
- Ph.D. students are mandated to submit at least two papers of global standards in Scopus and Thomson & Reuter Journals.
- Global exposure is also provided to students through visiting faculty, exchange programs, visits and attending seminars etc. So far 36 students of the University have gone on exchange programs.
- Students are encouraged to attend national and international conference/workshops/seminars.
- The language lab also assists students to overcome language barriers enabling them to compete globally.
- The University plans on obtaining NBA certification for its programs in accordance with the Washington Accord.

Inculcating a Sound Value System among students

In keeping with the ethos that a sound education needs to be based on societal value system, students and faculty of the University are periodically enthused on the significance of Indian values, especially respect of elders, religion and respecting the faith of others, social institutions and nature through:

- An oath administered by the Vice-Chancellor to new students.
- Undertaking by each student on anti-ragging and unacceptable behavior on the campus.
- Encouraging students to undertake projects of social relevance.
- Periodic talks, communications and interactions on ethical and socially relevant issues.
- Participative involvement of students in Spiritual Retreats, Jagrans, extension activities such as anti-drug, Girl Child awareness campaign etc.
- Formal education on physical training and yoga introduced for engineering students.

Promoting use of technology

Technology is aggressively leveraged by the University as it is seen as an equalizer in its quest for global recognition; the following examples enumerated to illustrate the point:

- o Highly specialized research equipment and instrumentation.
- o Use of Statistical Package for Analytical Analysis.
- o Extensive use of ICT, optimizing 'in-house' developed software.
- o Use of Video-Conferencing for remote lectures/ talks.
- o eUniv and virtual resource center.
- o Language Lab.
- o Provision of ICT enabled lecture halls

Quest for excellence

The University's quest for excellence is manifested in its vision, which is tangible and time-bound. This is reflected in a spectrum of fields; most important of them being leveraging technology to achieve global standards. Some of them are enumerated as under:

- o Memorandum of Understanding and links with leading industries for developing outcome driven curriculum.
- o Focusing on research excellence measured by global standards.
- o Research collaborations with reputed organizations.
- o Generating new knowledge and patent filing
- o Undertaking skill development to widen the scope of employability.
- o Exposure to corporate world through industrial tours and lectures
- o International exposure through exchange programs.
- o Use of modern teaching pedagogy.
- o Feedback from faculty, students, alumni and recruiters.

6.2   Strategy Development and Deployment

6.2.1   Does the University have a perspective plan for development? If yes, what aspects are considered in the development of policies and strategies?

The University has a twelve year perspective plan of development starting from 2010, which embodies structured action plan to be followed for achieving its vision and Mission to be amongst 200 globally ranked universities. Being nested in hilly region, the University plan envisages attaining a status as a role model for universities located in mountains, spreading from Afghanistan to Myanmar.

Vision and mission

The University aspires to be amongst top 200 global universities by 2022 by achieving excellence in research and teaching and for the mission for which the University has been established. To achieve this vision, the University is adopting best practices in its:

- o Education system
- o Research
- o Human Resource Development

Teaching and learning

Shoolini University is committed to excellence in all aspects of learning, transmission of the knowledge and developing skills and most importantly, to encourage free thinking to address complex challenges. In order to do this, the University focuses on the following:

- o Enhancing employability through skill enhancement, outcome driven curriculum and modern pedagogy.
- o Personal development of students through different modules, such as, tutorials, mentorship, computer literacy, meditation, communication and language proficiency etc.
- o Strengthening the eUniv platform.
- o Progressively shift to online examination and evaluation.
- o Faculty development programs.
- o Industry linkages and collaborations.
- o Strengthening of mentorship program.
- o Outer world exposure to faculty and students.

Research and Development

Shoolini University is located in Himalayas which has a fragile eco system and has unique requirements. This aspect is given highest importance while designing research and development polices. The University has, therefore, adopted a research driven model which seeks to blend expertise in life sciences and engineering with the principles and practices of business management and blends it with industrial and societal needs for the sustainable development of the Himalayas. The University's research philosophy therefore, rests upon the following verticals:

- o Develop excellence in scholarly standards with a focus to move into the club of internationally reckoned centers of research and education.

- o Harnessing Himalayan biodiversity, its conservation and sustainable management.
- o Develop cutting edge technologies.
- o Foster inter institutional collaborations.
- o Focus on niche areas like health care, food, energy conservation and generation, Nanotechnology etc.
- o Conduct quality research, encourage publications in journals of global repute and file patents

Community engagement

The University undertakes extension projects for the common good of the local society. The fields in which the University is directly and/ or indirectly involved and engages with the community are enumerated below:

- o Provide latest technical know-how and propagate best practices for the pharmaceutical and agro-based industry.
- o In order to win the confidence of the local farmers and entrepreneurs, the University plans to enhance the coverage of issues of free saplings of fruits and forest species and quality seed of vegetable crops.
- o Encourage watershed management system.
- o Encourage local building techniques and material.
- o Propagate risk mitigation against environmental disasters.

As the University grows in expertise and reputation, it plans to be a leader in extending technology and related developments for the larger Himalayan region, especially for the state of Himachal Pradesh.

Human resource planning and development

In view of the vision and aspirations of the University, the following benchmarks in terms of faculty development are planned:

- o Within four years 90 per cent of the teaching faculty should be Ph.Ds out of which at least 25 per cent should be post doc.
- o Enhance institutional support for promotion of qualification and international exposure.
- o Increase the quantum and extend geographical outreach of the faculty exchange program.
- o Increase the number of MoU's with international universities focusing on the United States, European Union and East Asia.
- o Increase cooperation and provide faculty to neighboring East Asian countries.

- o Broad base and enhance faculty-industry interaction with the aim to translate this in the form of consultancies and sponsored research.

Industry interaction

Shoolini University recognizes the importance of providing international, industrial and corporate exposure to its students and faculty. Frequent industry exposure through industrial visits and lectures by industry experts are a regular practice. The development plans in this direction include:

- o Expansion of the University's network and consolidate linkages.
- o Focus on partnership and participative cooperation.
- o Expand the scope of consultancy to provide the industry scientific solutions for their growth.
- o Strengthen the mentorship program through industry mentors both for students and faculty

Internationalization

As part of international tie-ups with various organizations, Shoolini University has an exchange program for students and the faculty to pursue studies and undertake research with universities, outside the country. However, the University plans to strengthen and collaborations and tie-ups with universities across the globe.

6.2.2 Describe the University's internal organizational structure and decision making processes and their effectiveness.

The organizational structure of the University is illustrated in figure 6.1 below. All decision making and governance issues are conducted in a transparent and participative manner and the process has proved effective thus far. Student involvement is ensured through Class Representatives and Student Committees.

Fig. 6.1 Organizational Structure
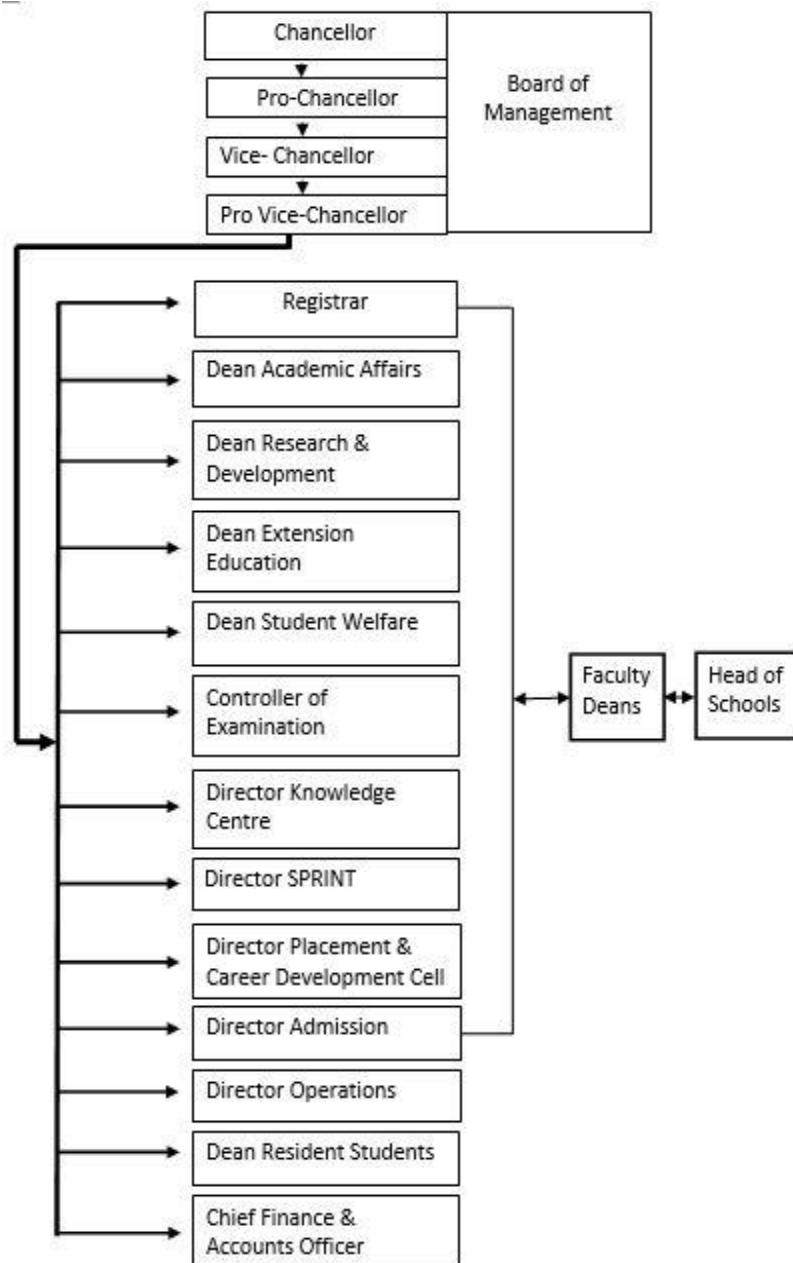
6.2.3 Does the University have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?

Shoolini University strives for excellence in each of its thrust areas. The five pillars to achieve its vision of being acknowledged amongst the best

academic institutions of the world are illustrated below and this edifice is built on a sound foundation of committed and transparent governance. In a way, these pillars embody the spirit of the five core values as advocated by NAAC, making them synonymous.

Fig. 6.2 Pillars to Achieve Excellence

All decision and policy making and the strategies to be adopted are taken in the letter and spirit of the vision to strengthen the foundation and the pillars. In practice this is ensured by the following:

1. **Faculty and Academic Delivery:**
    o Well qualified and competent faculty employed through a well-defined selection committee.
    o Retention and development of faculty ensured through Faculty Development Programs and by encouraging them on the path of self-development.
    o Student feedback ensures that each faculty member is assessed for effectiveness of teaching and this is a key parameter in the appraisal.
    o Faculty members are involved in improving teaching-learning-evaluation and guided through committees and mentors.
    o There is a well-defined process of review and upgradation of course curriculum through Academic Committees and Board of Studies.
    o Emphasis laid on application of learning. Project work assigned to students from the first year itself.

2. Infrastructure

- o Shoolini University has created infrastructure suited to its academic and developmental needs.
- o Well-equipped labs and workshops have been provided to each School. Equipment and facilities are periodically upgraded to keep pace with changing requirements.
- o Lecture rooms have been designed to provide quality learning environment and are equipped with audio visual aids.
- o Infrastructural excellence goes beyond academics and extends to hostels, sports facilities and other facilities.

3. Research and Development

- o Research is on the top of University's agenda. Research projects are regularly monitored and supported under Dean Research.
- o Well-equipped research labs have been provided and are constantly being upgraded depending upon fresh needs and projects.
- o Every faculty member is required to contribute research papers and encouraged to initiate fresh research projects.
- o Research collaborations with industry and globally reputed academic institutes are key objectives and are proactively pursued.

4. Academic Alliances

With the aim to provide quality education, the University has nurtured academic alliances with the reputed institutes for exchange of knowledge and expertise through student and faculty programs, joint research, training, conferences etc. The current academic alliances are as given below and the University plans to establish many more linkages:

- o Seoul National University, South Korea
- o Chung Yuan Christian University, Taiwan
- o University of Ulster, Northern Ireland
- o Sierra Bio Life, Australia
- o Gwangju Institute of Science and Technology, South Korea
- o The University of Suwon, South Korea
- o Magna Carta College, United Kingdom
- o Bukovinian State Medical University, Ukraine
- o Lanzhou University, China
- o Gachon University, South Korea
- o National Taiwan University of Science & Technology
- o Plants and Poisons Board of Kenya

5. Industry Linkages

- Establishing industry linkages is a thrust area for Shoolini University. These have led to successful partnerships with key corporate players like Genpact, Anand Automotive and DAMCO Soft etc. Similarly, partnerships in pharmaceutical sciences and food technology exist.
- Industry partners participate in designing and delivery of course curricula to align students with the expectations of the industry.
- There is regular interaction and exposure to industry through guest lectures by experts, visits and training.

6.2.4 Does the University encourage its academic departments to function independently and autonomously and how does it ensure accountability?

Yes, the Academic Schools of the University function independently and are autonomous with respect to academic pursuits, such as curriculum designing, term examinations, evolve and follow innovative teaching, research, consultancy, seminars, workshops etc. Nine Schools function under respective faculty Deans.

The Dean Academic Affairs undertakes audit of the Schools/ Faculties as defined in the prospective plan. The quality of teaching and learning is further assessed on the basis of feedback from students. School level Academic Committees and Board of Studies are other means to ensure the accountability of the Schools / Faculty.

6.2.5 During the last four years, have there been any instances of court cases filed by and against the institute? What were the critical issues and verdicts of the courts on these issues? Nil

6.2.6 How does the University ensure that grievances/ complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?

Redressal of grievances is done at multiple levels – both at the central and school level:

- At the school level, grievances from students are redressed through the medium of Mentor-Mentee system as also by direct representation to the program coordinator and Head of the School.
- Grievances could also be addressed directly at the University level to the Dean Student Welfare and Dean Resident Students.

- Students can also mail their grievance(s) at Care@shooliniUniversity.com for the attention of the Central Student Grievance Cell. Identity of the student is kept confidential in all such cases.
- Grievances cell is in place for Prevention of Sexual Harassment of Women Staff and Students.

6.2.7 Does the University have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?

Yes, students' feedback is collected through a well-structured questionnaire for improvement of the University's performance. The questionnaire covers the following aspects:

- Feedback on teachers on teaching pedagogy, punctuality, timely completion of syllabus, evaluation etc.
- Curriculum improvement and skill development
- Infrastructure and hostel facilities
- Library and Knowledge Center
- Food and transportation
- ICT facilities, eUniv and KMS
- Sports facilities
- Campus life and extra-curricular activities
- Examinations & evaluation

Students' feedback is considered an important parameter in gauging the faculty's performance and is reflected in the appraisal. Feedback on curriculum is incorporated after due deliberations. Feedback on infrastructure and other facilities is given due consideration to improve the performance of the University.

6.2.8 Does the University conduct performance audit of the various departments?

Yes, performance audit is carried out primarily by Dean Academic Affairs and Dean Research & Development as defined in the prospective plan. External experts are invited to review the academic performance of different Schools. Reports are submitted confidentially to the Vice Chancellor for implementation.

Non-Teaching and Administrative staff submit self-assessment report which is reviewed by the appraisal board in their presence.

The accounts are periodically audited by Chartered Accountants and submitted to Himachal Pradesh Government and other regulatory bodies.

In order to obtain a dispassionate and objective assessment, the University has obtained ISO certification.

6.2.9 **What mechanisms have been evolved by the University to identify the developmental needs of its affiliated institutions?** Not Applicable.

6.2.10 **Does the University have a vibrant College Development Council (CDC) / Board of College and University Development (BCUD)? If yes, detail its structure, functions and achievements.** Not Applicable.

6.3 **Faculty Empowerment Strategies**

6.3.1 **What efforts have been made to enhance the professional development of teaching and non-teaching staff?**

Professional development approaches of the University are illustrated below:

Fig. 6.3 Professional Development Approaches
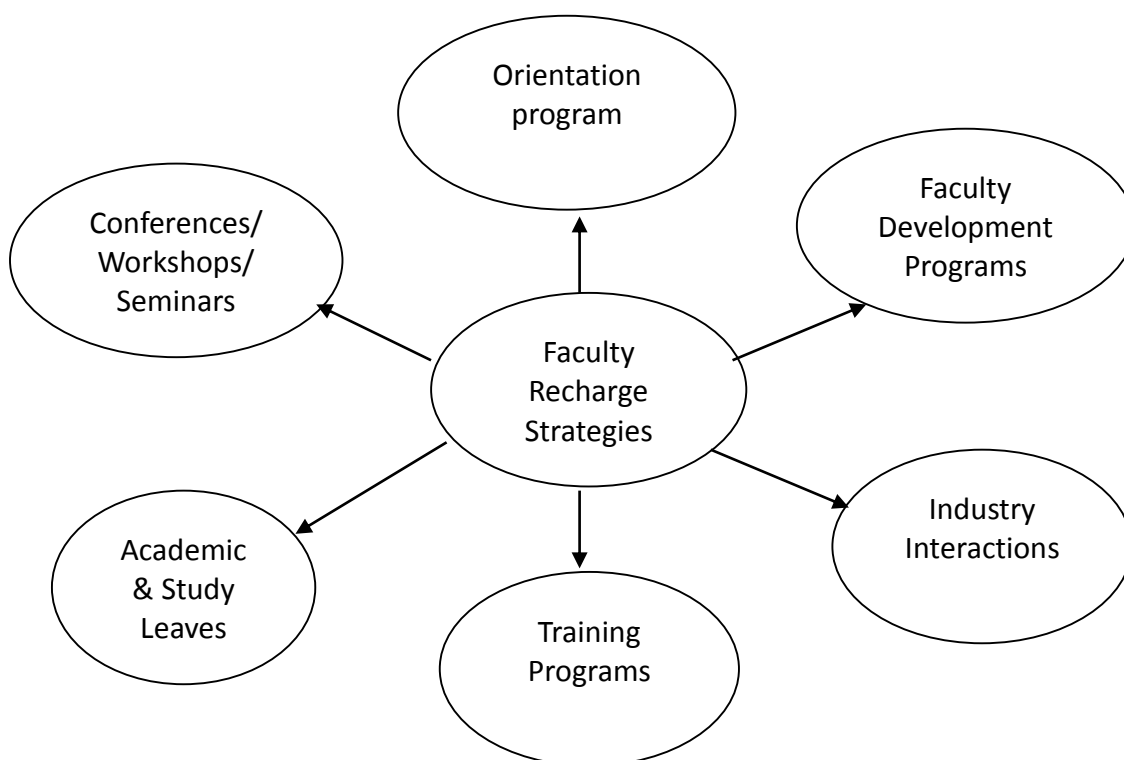
6.3.2 What is the outcome of the review of various appraisal methods used by the University? List the important decisions.

University has adopted a fully transparent annual Performance Appraisal System since 2011. Faculty and staff performance are evaluated broadly on the following parameters:
- o Teaching-learning-evaluation
- o Research initiatives
- o Values, integrity and ethics
- o Co-curricular engagements
- o Students' feedback

Outcomes of the appraisal are enumerated as under:
- o Performance based categorization of faculty and staff.
- o Faculty and staff development/improvement.
- o Innovation in teaching pedagogy and research methodologies
- o Reward achievers and motivate others to strive for excellence.

6.3.3 What are the welfare schemes available for teaching and nonteaching staff? What percentage of staff have benefitted from these schemes in the last four years? Give details.

All employees have benefitted out of the welfare schemes as enumerated below:

- o Health insurance.
- o Provision of medical leave and on campus medical facilities.
- o Exclusive facility for women in women center, including a crèche.
- o Subsidized transportation.
- o Employees Provident Fund.
- o Fee concession to wards.
- o Incentives for higher qualifications/ generating research grants.
- o Special facilities for differently-abled being progressively built up.

6.3.4 What are the measures taken by the University for attracting and retaining eminent faculty?

The University has instituted the followings initiatives for attracting and retaining eminent faculty:

- o **Compensation at par with Top Universities:** Salaries of senior teachers are higher than those prescribed by the UGC. The success of the policy is validated by the fact that less than five per cent of eminent faculty has left the University so far, making it less than one per cent per year.
- o **Rewards:** To promote excellence in original research, the University has instituted an award of Rs.10 lacs to a faculty member

who publishes his/ her findings in Nature and Science and Rs. 5 lacs for publishing in any other distinguished journal of status.

- o **Annual Appraisal:** The University reviews faculty performance for the purpose of development and enhancement.
- o **Promoting Professional Development:** Shoolini provides sabbatical and study leave for higher studies within the country and abroad. Faculty members are encouraged to attend workshops/meetings and provided financial support.
- o **Research Support:** The University has adopted a research driven model. Ample facilities and funding are provided to faculty members for fulfilling their research aspirations. In addition, they are also motivated and encouraged to apply for external funding.
- o **Spousal employment:** Eligible and well qualified spouses of the faculty are encouraged to take up employment in the University.
- o **Safe Environment:** The University provides an atmosphere free of all forms of harassment, exploitation, or intimidation. The University has a zero tolerance policy for discrimination and harassment of any kind.
- o **Creche:** The University has a Creche with basic amenities for day care of the children of the faculty and staff.
- o **Faculty Club:** For enhancing campus life, the University has an exclusive faculty club for socialization.

6.3.5 Has the University conducted a gender audit during the last four years? If yes, mention a few salient findings.

Shoolini University has taken initiatives to review gender distribution and its implications in the functioning of the University. Since its inception, the University encourages the provision of equal opportunities to both the genders at all levels. For example, spousal employment has been undertaken.

The University is presently undertaking the Department of Science & Technology sponsored survey "Assessing the Participation of Women in Science & Technology within University System in six States of Northern India". The survey is being conducted by Uttarakhand State Council for Science & Technology (UCOST) Dehradun. The findings from such a survey will be reviewed for adopting constructive reforms.

6.3.6 Does the University conduct any gender sensitization programs for its faculty?

The University strives to promote gender equality and awareness amongst its employees and student members. International women's day is

celebrated yearly since the last two years to promote gender awareness. Emphasis on women empowerment and gender awareness in society and at work was provided through expert lecture by Dr. Purnima Chauhan, Secretary (Administrative reforms), Government of Himachal Pradesh. The University favors women empowerment by instituting women candidates at key levels of administration. A Women Grievance Cell has been constituted for addressing the issues of sexual harassment and other grievances.

6.3.7 What is the impact of the University's Academic Staff College Programs in enhancing the competencies of the University faculty?
Not Applicable

6.4 Financial Management and Resource Mobilization:

6.4.1 What is the institutional mechanism available to monitor the effective and efficient use of financial resources?

Financial resources are broadly monitored by the University management board as per the following mechanism:

- o Budgetary estimates are prepared before the beginning of the financial year and presented to the finance committee.
- o On approval the estimates are circulated amongst all concerned.
- o The proposal for any purchase is first approved by the Dean and then put up to VC for his approval.
- o Purchases of more than Rs 20,000/- are put up to a Central Purchase Committee, which comprise of the VC, CFAO, Heads of various Schools and Director Operations.
- o Any proposal for expenditure which does not get the approval of a lower level is not put up to a higher level.
- o Quarterly expenses are monitored by the Core committee.
- o Actual expenses are compared with the budgeted expenses and remedial adjustments are sorted out.

6.4.2 Does the University have a mechanism for internal and external audit? Give details.

The University has a mechanism for both internal and external audit. Internal audit is held by internal agencies and external agencies as well. External audit is conducted by a Chartered Accountant on annual basis. Jagmohan Chohda & Co are the external auditors since 2009. Internal audit is conducted by S.P. Manhas & Co. and Jagmohan Chohda & Co, the Chartered Accountants.

6.4.3 Are the institution's accounts audited regularly? Have there been any major audit objection, if so how are they addressed.

The institution's accounts have been audited regularly. No major audit objection has been pointed out by the auditors. However minor observations/ suggestions made by the auditors are put up to Finance Committee for discussion/ implementation.

6.4.4. Provide the audited income and expenditure statement of academic and administrative activities of the last four years.

Please refer to Annexure VII attached.

6.4.5 Narrate the efforts taken by the University for Resource Mobilisation.

The project cost of the first phase was estimated to be around Rs. 75 Crores. The Foundation For life Sciences and Business Management, the Sponsoring Body of the University arranged for the required funds. The Foundation has been active in mobilising resources for the University. Surplus of income over expenditure is added to the General Fund every year. The Foundation also infuses the funds as and when required. Grants are also received from different government departments for financing the research projects. The grants received during the last five years are given in Annexure-VIII.

Total commitment for research projects is around Rs. 21 Crores. Training needs are also met partly from the grants received from Department of Science and Technology Government of India. Grants received on this account during last 5 years amount to Rs. 6.70 Crores.

As on 31st march 2014, Total Funds to the credit of General Fund stand at Rs. 14.91 Crores. Long Term borrowings stand at Rs. 36.80 Crores and Short Term Borrowing stands at Rs. 11.70 Crores.

Second phase of the project is expected to cost around Rs 50 Crores. The theme of the expansion project will be fully residential 24x7 Campus.

6.4.6 Is there any provision for the University to create a corpus fund? If yes give details.

The initial corpus of the University in 2009 was Rs. 3.42 Crores. The Society has been making contribution to the corpus regularly since then. The Society has made contribution of Rs. 1 Crore each to the corpus fund during the years 2013-14 & 2014-15.The balance standing to the credit of General Fund as on 1st April, 2014 is Rs. 15.61 Crores.

6.5 Internal Quality Assurance System

6.5.1 Does the University conduct an academic audit of its departments? If yes, give details.

University initiated the process of academic audit in 2011. Dean Academic Affairs has been assigned the responsibility of conducting a detailed academic audit of each faculty/school. However, external experts are also invited to evaluate the academic performance across the faculties. All academic activities of the school such as courses offered, teaching-learning methods, teaching and research facilities, number of faculty members and workload, research initiatives, conferences/workshops/seminars attended/conducted, books and papers published and research grants etc. are evaluated. Recommendations of the academic audit are duly implemented in the subsequent period.

The academic performance in each School is evaluated through the frequent meetings of Academic Committees under the chairmanship of Faculty Dean/HOS and the opinion of external experts is also taken to attain the academic excellence.

In addition, annual performance appraisal system was initiated during the year 2012-13 wherein each faculty member filled details of academic performance during the year in a self-appraisal form which were evaluated by the high level committee constituted by the University. Suggestions, recommendations and feedback are given through a face to face interaction with the committee.

In 2013-14, faculty wise Board of Studies was constituted as a next step in academic quality assurance. Renowned academicians and industry experts were included in the board to guide and suggest measures to achieve academic excellence.

6.5.2 Based on the recommendations of the academic audit, what specific measures have been taken by the University to improve teaching, learning and evaluation?

As per the recommendations of academic audit carried out at different levels, following initiatives have been taken by the University to improve teaching, learning and evaluation:

- o Case study method adopted wherever applicable.
- o Preparation of detailed lecture schedules.
- o Online examinations started.
- o eUniv initiative for round the clock learning.

- Feedback system developed.
- Course completion undertaking by each faculty.
- Online library services.
- Publications in SCOUPS indexed journals and progress report. presentations in each semester to improve quality of research.
- Lab manuals prepared.
- Action to apply for research grants has been taken.

6.5.3 **Is there a central body within the University to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

Yes, there is a centralized body headed by the Dean Academic Affairs to review the teaching learning process. Responsibilities of the Dean Academic Affairs are:

- To develop academic rules and regulations and ensure adherence.
- To bring out the academic calendar.
- To collect feedback from students.
- To incorporate and implement feedback from academic auditors and external experts to achieve excellence in academics.
- To evaluate the need for new program and courses in the University.
- To review the evaluation system.
- To ensure the conduct of academic audit and incorporation and implementation of its recommendations.
- To enforce development and revision of curriculum and course contents as per the current needs.
- To ensure quality of research through a check on the thesis/dissertation submission as per the University standards.

In the next step of quality assurance, IQAC was constituted in the year 2015. The structure of IQAC has been depicted below:

Fig. 6.4 Structure of IQAC
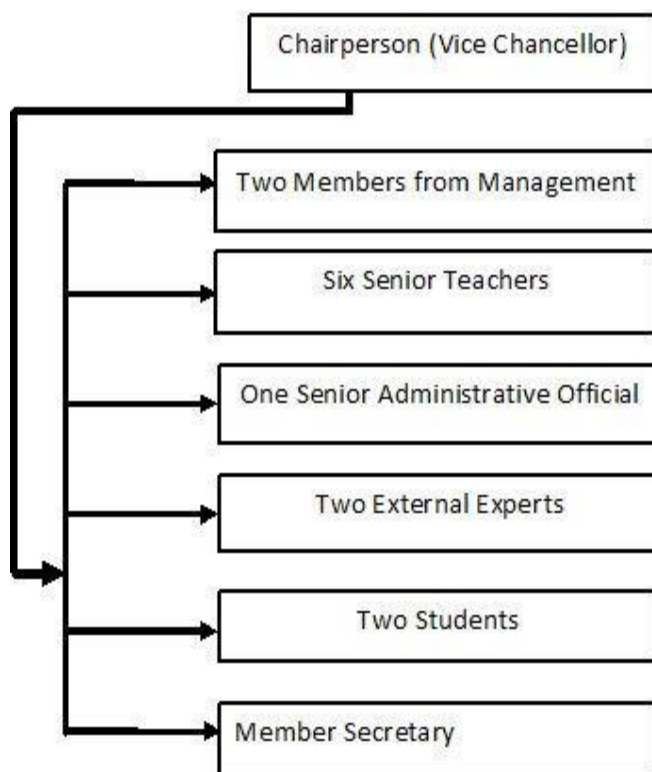
6.5.4 How has IQAC contributed to institutionalizing quality assurance strategies and processes?

First meeting of IQAC was held on 17th March, 2015 and few important recommendations were:

- o Adoption of Choice Based Credit System
- o Increase the number of Value Added Courses
- o Appointment/Designation of Coordinator for Minorities
- o Registered Alumni Association
- o Best Teacher Award
- o Reconstitution and strengthening of Global Advisory Committee
- o Defense Coaching Cell to encourage students to join armed services

6.5.5 How many decisions of the IQAC have been placed before the statutory authorities of the University for implementation?

All the recommendations given under 6.5.4 above have been placed before the statutory authorities of the University for Implementation.

6.5.6 Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.

Yes, the following external experts are the members of IQAC:

The external members recommended that:

- o Extension activities should be enhanced.
- o University should become a green campus.
- o Strategies to enhance academic success of students belonging to disadvantaged section of the society be developed.

Notwithstanding the fact that the University has already been working on these issues, it decided to be more active in this direction.

6.5.7 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?

The University is in the process of implementing the recommendations of the IQAC under item 6.5.6.

6.5.8 What policies are in place for the periodic review of administrative and academic departments, subject areas, research centers, etc.?

Yes, the periodic review of the administrative, academic and other activities is done as per the details below:

Academic Review:

The periodic academic reviews on issues like curriculum revision, quality teaching, need for new courses, preparation of lecture schedules, pedagogy and evaluation etc. are conducted by the Academic Committees which include opinion from external experts from industries. Constitution of Board of Studies in 2013 strengthened this process. The Academic Council as per the recommendations of Academic Committees and Board of Studies approves the improvement initiatives to be implemented at School level.

Research Review:

Joint Research & Development Advisory Committee (JRDAC) which apart from faculty deans and senior faculty members includes eminent scientists and academicians from renowned institutes as external members guides and monitors the research activities of the University and provides directions in the different fields of research.

The office of Dean Research facilitates research activities and ensures implementations of the recommendations of the JRDAC.

Faculty wise Research & Development Committees have also been constituted which ensure the adherence to research policies of the University and monitors the students' research progress.

Administrative and infrastructural Review:

Administrative activities are reviewed by the Registrar whereas the infrastructural and maintenance matters are reviewed under the leadership of Director Operations.

At the school level, these activities are discussed in frequently conducted faculty meetings under the chairmanship of Faculty Dean. Each school has a designated Infrastructure In-charge to look after its logistics, cleanliness and maintenance needs.

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

Aspiring to be amongst the Top 200 Global Universities that too by a defined timeline, requires 'out of box' solutions and sustained efforts. Having taken up the gauntlet, Shoolini University remains committed to fructify the vision of its founder; the coverage of C-fore's nationwide survey carried in the Education Watch issue of May 2015 has acted as a tonic and reinforced this commitment. Being ranked 124th out of over 693 universities nationwide and 54th Most Admired Research University within a short journey of less than six years is indeed heartening. The University has built its edifice on following 'Best Practices in Education' and is pro-actively leveraging technological solutions towards attaining its time bound goals.

7.1   Environment Consciousness

Since sustainability of the Himalayan eco-system is a thrust area for Shoolini University, it is incumbent that the focus is directed on environment, especially since the University is nested in the Mid Himalayas. This includes taking up eco preservation in an institutionalized manner and focused research for the rejuvenation of the eco-system.

It was for this purpose that the University started an 'Eco Club, in early 2012, with the aim of creating a 'Clean and Green Consciousness' on campus, and progressively extending to the immediate neighbourhood and the larger Himalayan Region. It was in pursuance with this aim that the University not only takes pride in being a 'neat and litter free' campus, but being a part of the Prime Minister's 'Swach Bharat Abhiyan' and undertaking research on Himalayan sustainability, individually and as part of the consortia of Himalayan Universities.

7.1.1   Does the University conduct a Green Audit of its campus?

Shoolini University is ISO 9001:2008 compliant; clause 5.5 on environmental audit certifies that its facilities and processes are as per prescribed norms.

While many steps for harnessing renewable energy are in place, the building of the Central Library requires special mention. The five storeyed library that has been built around a central atrium, which not only permeates natural light, but radiates heat internally, resulting in 80 percent energy savings. In addition, the University carries out periodic audit, focussing on the following aspects:
  o   Exploitation of Renewable Energy for lighting, heating and cooking.
  o   Rain water Harvesting.
  o   Utilization of sewerage water.
  o   Minimize use of paper.

- Utilization of Kitchen waste.
- Proper destruction and Disposable of Bio-degradable and Non – degradable Waste
- Destruction and/or Disposal of Hazardous Materials.

7.1.2 What are the initiatives taken by the University to make the campus eco-friendly?

Energy conservation:

In addition to the Green attributes mentioned in para 7.1.1, all members are encouraged to switch off electrical appliances and lights when not in use. Sign posting and notices have been prominently displayed to remind people of their social responsibility.

Use of renewable energy:
In addition to the above, the following are in place:

- All hostels have solar water heaters.
- Girls Hostel has Solar Induced Steam Cooking facilities.
- Internal heating in rooms planned through steam pipes ducting.

Water harvesting:

The following are in place:

- Waste water from girl's hostel (located uphill) used for gravity induced drip irrigation for library lawns.
- Water reservoirs to recharge underground water planned.
- The University has its own sewage treatment plant and it is ensured that all effluents are treated properly before they are released in the natural drainage.

Check dam construction:

Being on a hillside, the check dams and retaining walls have been added to reduce soil erosion, channelize the water flow as also to recharge underground water. Presently, being undertaken on a limited manner.

Efforts for Carbon neutrality:

ISO certification has certified that the campus meets laid down norms. Notwithstanding, the following measures are undertaken:

- All labs that produce/ require hazardous materials/ chemicals are audited regularly.

- o Record maintained of emission levels.
- o No burning of leaves etc. is permitted.
- o Though outsourced, scientific disposal of waste materials is monitored.

Plantation:

The University is proactive in reviving the bio-sphere and has been actively participating in plantation drives. In addition, quality fruit and commercial saplings are distributed to the neighboring villages free or at subsidized cost. Panthi village being in a backwards part of Shimla district has been adopted for free distribution of fruit saplings since the past four years and it is heartening that fruits of the first plants have reached markets.

Hazardous waste management: Please refer to points given above.

e-waste management: Disposal is outsourced.

Any other

Though located in a pine forest, there is a progressive plan to create an arboretum around the campus, making the campus a regional green lung.
In addition, the commitment to make the campus 'paper free' is another step towards meeting the ends of ecological preservation.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the University.

Technology has been leveraged as it is opined that this is the greatest enabler for the University to attain its goals in the defined timelines. Taking advantage of an interconnected world, where distances have been telescoped and there is a wealth of knowledge available in the digital world, the University has developed its ICT infrastructure and optimized freely available software towards meeting its ends to proliferate knowledge. Though the range of innovations are large, starting from 'in house' developed ERP solutions to digitization of the library, some of the major innovations developed 'in house' within the University are enumerated:

- o **Development of the LMS and KMS Systems.** In pursuance of extending quality education, the University has kick started its eUniv project with which students were provided 24x7 access to quality education and at the same time, added to the outreach of the institution. In principle, the LMS platform through which the eUniv is extended, and the KMS which is under development, will act in synergy and not only supplement 'class room' learning; through the

KMS, students and faculty will have access to advanced learning resources through domain specific portals. While the LMS is structured for class room learning, the KMS would open avenues for research. The broad functions of the two is illustrated in figure 7.1.

Figure 7.1: Resources made available for Learning and Research

LMS

- **Repository of all lectures and power point presentations as recorded for class room teaching**
- **All teachers would record the same at the e-studios - uploading on approval of Dean/HoS.**
- **Presentations and Video recordings of talks held centrally ar under the faculty and/or school**
- **All study material will be listed along with references for advanced study, including material available in the University KMS**
- **Will also provide academic schedule, programs, sllybus, question banks etc.**

KMS

- **Repository of all advanced references, cross linked with their availability**
- **Repository of all e-resources (books and Journals), available within limits of propriety**
- **Scanned and downloaded articles form Technical Journals and the internet**
- **All papers published through the University, dissertations, thesis, and projects**
- **Scanned copies of books within limits of propriety**
- **All stake holders (alumnai, industry, academeia) etc. can add / suggest resources**

o **Digitization of the library resources and interlinking of school libraries and Study Center**. This has been listed as an innovation, not because it is a novel initiative, but because of the innovative manner of how the architecture has been configured and in the manner freely available software has been synergized towards meeting the outcome. Under this, the Central Library is linked with all nine School libraries and the Study center powered by Shoolini University. In view of its success, a patent has already been applied for by the University.

- o **Installation of Freely Available Software for Analytics Lab**. The Chief Information Officer has been able to provide a complete solution for Statistical Research. The software provided is fully compatible with the SPSS which was being provided by a vendor for remuneration. The system has provided a complete solution for statistical research and become a great research tool for all Schools.

- o **Linking of Auditoriums.** Interlinking of auditoriums and made them interactive through video conferencing has provided a technological solution and mitigated the terrain constraints of the University. Construction of large auditoriums, though possible, is a major challenge in hillsides and this solution has not only added to the capacity of audience, but also made it possible for inter-active sessions with instructors, worldwide.

- o **Guru Series of Talks as part of the Yogananda Knowledge Initiative.** The Guru series of talks which was started in the last academic year and has proved to be a major success. Under this initiative, Captains/experts and leading personalities, from different walks of life share their experiences with students. The periodicity of this talk is fortnightly, and from the current session will be part of the 'zero' period of the schedule. In addition, a brief mention of the 'SPRINT' program is also being made, though this has been covered separately as a 'Best Practice' later in this section. Essentially, this is a skill enhancement program, and has proved invaluable for enhancing the employability of students. Because of its success, the program has been extended across the University.

7.3 Best Practices

7.3.1 Give details of any two best practices which have contributed to better academic and administrative functioning of the University.

Best Practice - 1

1. **Title: Promoting Academic Excellence by blending Experience with Talent**

2. **Objectives of the Practice:**

   The bedrock for creating a world class University is contingent upon the quality of teachers, especially if it aspires to achieve excellence

in academics and research. Though in congruence with the need of the hour for the nation, proliferation of universities and colleges has generated a pan India challenge for Institutes of Higher Education if they are to match and/ or better global standards. Within this, it is an uphill task for any up-coming 'private' University to attract and retain talented teachers to provide continuity in learning and research and at the same time, motivated to aspire for excellence.

Right from its inception, Shoolini University, envisioned itself to be among 200 global universities by the year 2022. To meet this time bound goal, it formulated its own model of faculty development with the aim of imparting balanced education and making its students employable. For this, it evolved a 'Research Driven Model', aimed at following an interdisciplinary approach between basic, applied and engineering sciences, with a wrap up of management sciences and liberal arts.

3. **The Context:**

In order to meet its ambitious goals, a 'Four tier System' for Faculty Development was evolved by the sponsors of the University, with pro-active support of visionary educationists and scientists, who remain either on its Executive or Advisory Board. The endevour was to set up a world class University, combining academic and teaching pursuits with research for achieving aforesaid rank in 12 years starting from the year 2010.

An analysis of the global ranking mechanism both by the 'QS' and 'The Times', indicated that over 60 per cent emphasis laid on research and was calculated on the basis of research papers and their impact factor, resulting in h-index rewards, distinctions, patents along with quantum of extramural grants from public institutions and industrial sectors. Of the two raking systems 'The Times' eligibility criteria is for filing application calls for a minimum of 200 research papers annually (continuously for five years) which may not be possible without the participation of meritorious and well trained Post Docs at the mid-level, along with the wisdom of Professors of Eminence who are available to train the younger faculty for and support the research driven model of the University.

4. **The Practice:**

The reputation of any University depends on the quality of teachers. Apropos, Shoolini University has adopted a four tier policy to attract

outstanding and experienced teachers. The manning of teachers is therefore planned at four tiers:

- **Top Tier.** Distinguished and decorated scientists/ academicians
- **Mid-Tier.** These are mid-career (Senior Assistant and Associate Professors) teachers, either with Post Doctorate from Internationally acknowledged Centers of Excellence or teachers serving in similar positions in other institutes or holding mid-career positions in corporate sectors.
- **Intermediate Tier.** This tier includes young dynamic and NET qualified Ph.D's., who have the attributes to excel.
- **First Tier.** This tier is manned by in-house qualified Ph.D. scholars in pre-identified disciplines. This with the twin aim of training the talented, and also to guide their further pursuit under experienced and talented mentors.

For the top tier, Shoolini University created twelve positions of Professors of Eminence, and in the second tier it has recruited two dozen Post-Docs from the USA, Japan, Europe, Taiwan, Spain and South Korea and other reputed Centers from India and the Corporate Sector. At the third tier are young dynamic Doctoral teachers from renowned Institutes in India, while the first tier is manned by brilliant teachers who have registered for Ph.D. in pre-determined areas of the specialization.

Though desirable, paucity of funds is an impediment to increase the number of mid-career Post Doc teachers; the University having to spend three times better wages than their Indian counterparts. Presently a host of them are drawing more salary than their counterparts from public universities and even UGC scales.

Shoolini University recognizes that the commitment to increasing faculty does not end after the appointment of a new faculty member. Advancing and retaining talented faculty is just as important to enhance the quality and diversity of the faculty, as is the task of recruiting them.

Among the many factors that contribute to the advancement and retention of faculty is the working environment within various faculties, schools and the University. In order to provide an intellectually stimulating and socially congenial atmosphere, the University has instituted several initiatives to retain the faculty. Some of them are listed:

- o Compensation competitive and at par/better with top universities.
- o Annual appraisal for enhancement of pay depending on the achievement(s).
- o Promotion of professional development.
- o Research support, especially to new faculty.
- o Spousal employment.
- o Safe environment, crèche and faculty club.
- o An award of Rs 10 lac for any research paper published in Nature or Rs 5 lac for publishing in any other distinguished journal of equivalent status.
- o The University has liberal rules to spend summer/winter vacations or sabbatical leave for finalizing their research finding and also for the purpose of strengthening of tie ups with their counterparts in foreign countries.

5. **Evidence of Success:**

Success of the practice of faculty engagement in the system can be gauged from the fact that over 90 per cent teachers have continued in the University. Consequently, noticeable improvements have taken place in teaching, research and extension activities and is substantiated by the following achievements of the University:

- o Within a short span of six years, the University is ranked 124th in the list of leading universities of the country, 41st among Private Universities, and 54th in the list of Most Admired Science/Technology Universities.(C-fore survey carried in Education World issue of May 2015).
- o Ranked second amongst Bio-Science based Universities by Bio-spectrum- a prestigious journal.
- o Visible cooperation and participation of teachers has led to enhancing employable skills and placement of students.
- o Teachers participate voluntarily in activities relating to the revision of curricula. Choice based credit system has been accepted willingly from the academic session (2015-16).
- o All teachers formulate their schedule of lectures and lectures are uploaded by the teachers on eUniv platform. The University is on its process to implement switch over of on-line examinations.
- o Library has been made fully digitalized by in-house software development.

o The number of Ph.D. teachers has increased and currently there are 210 research scholars pursuing doctoral studies.
o 24 teachers have external funding of their research projects. This totals to Rs 15 crores by way of extramural grants.
o Professors of Eminence at the top and mid-level of Post Docs has increased alliances with a dozen of countries for exchange of students and faculty. In the last two years 36 students have undergone semester exchange programs.
o 'h' index of 13 is the highest amongst all private and public universities established after 2008, in North India.
o All teachers and Ph.D. students publish papers in Scopus or Thomson and Reuter indexed journals.
o A dozen patents have been filed by the University, essentially focusing on the biochemical and molecular studies on flora and fauna of Himalayas.

6. Problems Encountered and Resources Required:

1. Despite such notable achievements, private universities have not been able to establish its credibility amongst the public and the academic community of public institutes. Young members often indulge in confrontation with the Professors of Eminence in private universities retarding growth.
2. In the guise of enforcing quality education, the academic authority of the universities tends to get eroded. It needs to be reiterated that globally, Academic Councils are accepted to be superior to administrative regulatory authorities.
3. Increase or decrease of number of seats in a program for the parity purposes and not on merit is un-academic.
4. Any reduction in the number of doctoral students retards the utilization of talented and expensive mid-career Post Doc faculty. This also retards the vision of the University to be amongst globally ranked institutes.
5. Lack of appreciation of global stands and enforcement of interpretations of regulations are generally counterproductive for those who strive for excellence. 'h' index of 13 achieved by Shoolini University, the highest among public and private institutes established after 2008, speaks of its research achievements by itself.
6. Based on the above, the retention policy tends to fray as many teachers who have worked in the USA and other highly ranked Labs, murmur to return.

7. Differential salary creates heartburning among teachers. Their mind set is to rest on previous laurels and bask in the glory of previous academic achievement, year of passing Ph.D., seniority of service etc. rather than on the quality of research papers published. To narrow down this gap, opportunities should be given to such teachers for Post Doc studies for which funds are required to be provided.

8. Funds/resource requirement: Since this is a nationwide malady in the system of Higher Learning in India, and the gap needs to be bridged, it is recommended that the government needs should create a separate corpus fund for private universities and 50 per cent salary of NRI teachers engaged by the private universities should be borne by the government. Liberal research grants should also be given to the teachers working in private institutions so that this national pool is nurtured collectively as a national responsibility.

Best Practice - 2

1. Title: Developing Inclusive Competencies through SPRINT

2. Objectives of the Practice

Delivering uniform pedagogy to the diverse student population with varied demography, social background, exposure levels and language skills is a major challenge. The objective of the SPRINT (denoting accelerated learning) program, therefore is to promote personal and professional growth of each student and to make them globally competent. It attempts to inculcate professional ethics and respect for institutional values so that they are contributing members to the community and nation building.

3. The Context

The Confederation of Indian Industry (CII) released an illuminating report titled 'India Skills Report 2014,' highlighting the challenges that India faces in providing marketable skills and making the youth, 'employment ready.' While the Global Talent Index 2015 assesses that 39 percent of business houses around the world struggle to recruit the right persons, 64 percent of them citing the absence of requisite skills the challenge gets magnified for India as about

75 percent of the business houses struggle to find employable persons with the requisite technical and soft skills.

In view of these challenges, a pointed but sustained intervention was developed as a structured program to bridge gaps in the existing skill set of students. Tailored on the mini MBA program of Stanford University, the SPRINT program initiated by Shoolini University is a blend of classroom activities, simulation exercises, and real life experiences. The objective is to provide an inclusive learning environment, which is stimulating, relevant, and engaging; a fusion of functional and technical skills required for practical use in the real life. Feedback from students provides ample evidence that this form of 'experiential' learning has made a qualitative change in the students of the University, and been a 'Game Changer' in their lives.

4. **The Practice**

Learning new things is invariably a challenge; it can be mentally exhausting to learn new skills, that too in a short period of time. It is in keeping with these that SPRINT training modules are divided into small interactive sessions to extend the learning process throughout the course. This not only helps to maintain contact with students but periodic intervention also acts to refocus, yet offering the intervening time for self-improvement. In addition, frequent interaction with the corporate big wigs and experts from all walks of life opens the minds of students to wider horizons and varying perspectives which helps them to transit into the real world.

Each SPRINT has a central theme which differs for each module and it is need based, hence different for each school and semester. The program which was started as a pilot project for MBA students, has proved to be a major success story and enriched by the experience, this has been extended across all faculties of the University. SPRINT modules conducted for the MBA students are given below:

- o **Induction.** This is a crisp program and acts as an ice breaker for new students once they come on board. This is a surefire way for students to bond with faculty, seniors and peer group to make them feel comfortable in the new environment. Students are given an opportunity to associate with the University's culture and blend in the environment supportive of their professional growth.

o **Ten Day MBA** (Basic). This SPRINT attempts to introduce course subjects to the students and is helps the ones who are from various streams to understand the basics of subjects they have not studied earlier.

o **10 Day MBA** (Advanced). This deals with the subjects at an advanced level. It is interactive and case study are introduced for students on operational and practical aspects. Guest faculty adds value and is a good bedding in ground for students as they prepare for their transition to the corporate world

o **Entrepreneurship.** Business models, franchising, network distribution, Business plan, interaction with successful entrepreneurs are part of this Sprint. Students create and launch a short term business plan and even get rewarded for the one generating maximum revenue.

o **Self-Development**. Exhaustive sessions on written and verbal communication are conducted. Listening, articulating, probing, team work, time management and goal setting are some of the subjects of this SPRINT.

o **Pre Placement.** This is the longest and the most strenuous module which is of two-three weeks duration. Students go through mock interviews, group discussions, etiquettes, grooming, content enrichment etc. Dedicated trainers take charge of aptitude training which helps students to cross the first hurdle of the selection process. Students are guided to answer the FAQ's related to technical and soft skills. There is a strong corporate presence and top management of leading companies interact with students guiding them through the campus to corporate experience.

The program for other schools has been patterned on the lines given above, though the technical content and placement requirements differ.

5. **Evidence of Success**

Students are the heart and soul of a University and are required to be trained and developed so they can reach their full potential. An employer may spend a fortune on hiring the most promising

newcomers, but if not trained properly, even the talented will fail to deliver. This highlights the fact that such programs need to be student centric and focused. Enhancement of confidence, communication skills and overall personality of students is reflected in the student's ability to face interviews with sought after companies which have very stringent recruiting procedures - the success of this program is evident from the response of recruiters.

- o Alumni feedback is another evidence that validates the success of this program. They have expressed that undergoing the program has been a game changer for them as they feel a significant difference in their overall persona.
- o The demand for this program has spread not only across the entire University but in other educational institutes.
- o The enhancement in confidence levels of students is also apparent from the way they are able to compere shows, make presentations and organize events without interventions.
- o Faculties who were skeptical of this program now ask for it on a regular basis.
- o Shoolini students stand out during their training periods and seem to be more in control of their "Campus to Corporate" journey. This program has played a significant role in the laurels earned by The School of Business Management and Liberal Arts. It is essentially because of the success of the SPRINT that the school has been ranked the best private upcoming business school by ASSOCHAM India.

6. Problems Encountered and Resources Required

The success of this program has not been without roadblocks.
- o Since the demand for this program outstripped capabilities, it was a challenge to cater to large numbers.
- o Maintaining the quality of the program remains a major challenge.
- o Important resources required for SPRINT are top class infrastructure, dedicated trainers, corporate interaction and an environment that fosters learning. Support from governmental bodies would go a long way in supporting programs like this which are a very crucial part of the National Skill Development Program.
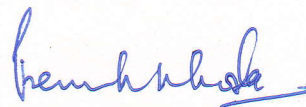
Statement of Compliance

(State Private Universities)

This is to certify that **Shoolini University of Biotechnology and Management Sciences, Village Bajhol, PO Sultanpur, Solan-173229 (Himachal Pradesh)** has complied with all the provisions of the following Regulations governing it:

*UGC (Establishment of and maintenance of Standards in Private Universities) Regulations, 2003 and further amendments, if any, notified by the UGC.

Any false or misleading information provided by the institution, will be viewed seriously by NAAC and the accreditation; given is liable to be withdrawn.

(Prof P.K.Khosla)
Name and Designation with seal
of the Vice Chancellor

Date: 27/06/2015

Ph. 23236351, 23232701, 23237721, 23234116
23235733, 23232317, 23236735, 23239437

www.ugc.ac.in

Speed Post

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बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

F.No. 8-1/2010 (CPP-I/PU)

February, 2011

The Registrar,
Shoolini University of Biotechnology
and Management Sciences,
Village Bajhol, P.O. Sultanpur,
Distt. Solan, Himachal Pradesh – 173 229.

Sub: - Inspection of Shoolini University of Biotechnology and Management Sciences, Solan (H.P) (State Private University).

Sir,

I am directed to refer to the visit of the Expert Committee to Shoolini University of Biotechnology and Management Sciences, Solan on 18th & 19th October, 2010 to assess its physical and academic infrastructure and to say that the Report was considered by the Commission in its 474th meeting held on 6th January, 2010 (Item No. 5.01). The Commission resolved as under:-

"The Commission considered the Report of the Inspection Committee of Sholloini University of Biotechnology and Management Sciences, Solan, Himachal Pradesh (Private University) and approved the Report. However, the Commission decided that the words "it is a fit case for recognition by UGC..." may be deleted while placing the report on the UGC website. It was also decided that the University may be asked to send an Action Taken Report within three monts on the suggestions of the Committee.

Accordingly, you are requested to send compliance report in respect of the observations / suggestions / deficiencies pointed out by the UGC Expert Committee. A copy of the report is enclosed.
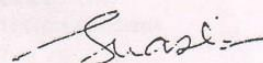
This is also stated that Shoolini University of Biotechnology and Management Sciences, Solan has been established by Act (No. 20 of 2009) of State Legislature of Himachal Pradesh as a State Private University and is empowered to award degrees as specified by the UGC under section 22 of the UGC Act 1956 through its main campus with the approval of statutory councils, wherever required.

Apart from the above, it may also please be noted that the University has to take an immediate action on the following:

i)   To ensure that no off campus centre(s) is opened by the University outside the territorial jurisdiction of the State in view of the judgement of Hon'ble Supreme Court of India in case of Prof. Yashpal vs. Government of Chhattisgarh.

ii)   In case the university has already started any off-campus centre outside the State, it must be immediately closed. It may also be ensured that any off-campus centre even within the State shall be opened only as per the provisions laid down in the UGC (Establishment of and maintenance of Standards in Private Universities) Regulations, 2003 and with the prior approval of UGC.

iii) No distance education programmes shall be started without the prior approval of Distance Education Council, IGNOU. New Delhi.

iv)   The University may not have any affiliate College.

Yours faithfully,
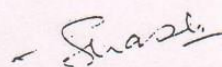
(Shashi Bala Arora)
Under Secretary
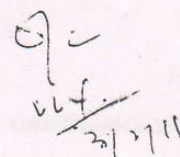
Encl: As above.

Copy to:-

1. The Secretary, Government of India, Ministry of Human Resource Development, (Department of Secondary & Higher Education), Shastri Bhawan, New Delhi-110 001.
2. The Principal Secretary (Education Deptt.) Govt. of Himachal Pradesh, H.P. Secretariat Shimla – 171 002 alongwith a copy of the report.
3. Distance Education Council, IGNOU, Maidan Garhi, New Delhi alongwith a copy of the report.
4. SO (Meeting) UGC, New Delhi (ATN UGC item No. 5.01 dt. 13.12.2011)
5. P.O. (Website) UGC, New Delhi.
6. DS (FD)/SO (FD), UGC New Delhi.
7. DS (SU)/XIth Plan UGC, New Delhi.
8. Guard File.
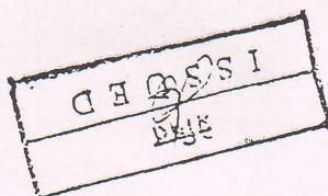
ISSUED

(Shashi Bala Arora)
Under Secretary

BMSCERT
Quality Assessors

CERTIFICATE OF REGISTRATION

This is to certify that the
Quality Management System of

Shoolini University of Biotechnology and Management Sciences

FLSBM, Anand Complex, The Mall, Solan,
Himachal Pradesh (H.P), India

has been assessed and approved
in accordance with the guidelines of

ISO 9001:2008

for the following areas

Education and Research Work in the field of Bio Sciences, Engineering, Management and other Subject and Fields.

Certified Locations: FLSBM, Anand Complex, The Mall, Solan, Himachal Pradesh (H.P), India

Validity of this certificate can be verified at www.bmscert.org/verify

Director   Director

Date of Registration: June 16, 2015
Date of Certificate: June 16, 2015
Valid Upto: June 15, 2016
Recertification Due: June 15, 2018

Q-3077/15
Certificate No.

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: 26565694 26562133
: 26565687 26562144
: 26562134, 26562122 (EPBAX)
फैक्स/FAX : 26960629, 26529745
Website : http://www.dsir.gov.in

सूचना का अधिकार

भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
वैज्ञानिक और औद्योगिक अनुसंधान विभाग
टेक्नोलॉजी भवन
नया महरौली मार्ग, नई दिल्ली - 110 016
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
Department of Scientific and Industrial Research
Technology Bhavan
New Mehrauli Road, New Delhi - 110 016

By Registered Post

Date : April, 2014

F.No.11/446/2005-TU-V

The President
Foundation for Life Sciences and Business Management
Anand Campus, Near GPO, The Mall
Solan - 173 212
Himachal Pradesh

Subject : Registration of Research Institution, other than a Hospital, for the purposes of availing Customs/Central Excise duty exemption in terms of Govt. Notifications No. 51/96-Customs dated 23rd July, 1996 & No. 24/2007-Customs dated 01.03.2007 and Central Excise Duty Exemption in terms of Govt. Notifications No. 10/97-Central Excise dated 1st March, 1997 & No. 16/2007-Central Excise dated 01.03.2007

CERTIFICATE OF REGISTRATION

This is to certify that **Foundation for Life Sciences and Business Management, Solan** is registered with the Department of Scientific and Industrial Research (DSIR) for purposes of availing customs duty exemption in terms of Government Notifications No. 51/96-Customs dated 23rd July, 1996 & No. 24/2007-Customs dated 1st March, 2007 and Central Excise duty exemption in terms of Government Notifications No. 10/97-Central Excise dated 1st March, 1997 & No. 16/2007-Central Excise dated 1st March, 2007 as amended from time to time. The Registration is subject to terms and conditions mentioned overleaf.

This Registration is valid upto 31.03.2017.

Please acknowledge the receipt.

Yours faithfully,

(K.V.S.P. Rao)
Scientist - 'G'

अखिल भारतीय तकनीकी शिक्षा परिषद
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
(भारत सरकार का एक सांविधिक निकाय) A STATUTORY BODY OF THE GOVT. OF INDIA)

F.No.08/04/HP/PHAR/2008/01
Date June 02, 2009

To
The Commissioner-cum-Secretary
(Technical Education) Govt. of Himachal Pradesh,
Shimla - 172 002

Sub: Extension of approval to SCHOOL OF PHARMACY VILLAGE BHOJALDISTT. SOLAN – 173230
HIMACHAL PRADESH for the academic year 2009-10

Sir,

As per the Regulations notified by the Council vide F.No. 37-3/Legal/2006 dated 14th September 2006 and norms, standards, procedures and conditions prescribed by the Council from time to time and based on the recommendations of Appraisal Committee / Expert Committee, I am directed to convey the extension of approval of the Council to SCHOOL OF PHARMACYVILLAGE BHOJALDISTT. SOLAN - 173230HIMACHAL PRADESH for conduct of the following courses with the intake indicated below:

Name of the Course(s)	Existing Intake	Approved Intake 2009-10	Period of approval
B.PHARMACY	60	60	2009 -10
TOTAL	60	60	

* The Compliance Report with requisite processing fee is required to be submitted every year by 31st August irrespective of the period of approval.

The above approval is subject to rectification of the following observations / deficiencies / specific conditions by 31st August 2009:

Computers:
➤ Shortage of International Journals by 100%

The mandatory disclosure in prescribed format is required to be hosted on the website as per ections in the AICTE website failing which, action would be initiated as per the rules and regulations of the AICTE including No Admission / Withdrawal of approval.

The institution is required to submit two copies of the Compliance Report, indicating the _____ deficiencies along with mandatory disclosure and details of faculty recruited for each course in the prescribed _____ available at AICTE website www.aicte.ernet.in) to the concerned Regional Office latest by 31st August 2009 for _____ of approval beyond the session 2009-10. **It may be noted that all the institutions are required to submit the Compliance Report alongwith requisite processing fee by 31st August every year irrespective of the period of approval.**

The Compliance Report must be accompanied with a processing fee of Rs. 50,000/- in the form of demand _____ the favour of Member Secretary, AICTE, payable at New Delhi. In the absence of processing fee the Compliance Report _____ not be entertained. Following the Compliance report, the Council would verify the status in respect of rectified deficiencies through surprise random inspection without any prior notice.

The above approval if granted after rectification of deficiencies would be subject to the fulfillment of the following general conditions.

1. That the management shall provide adequate funds for development of land and for providing related infrastructural, instructional and other facilities as per norms and standards laid down by the Council from time to time and for meeting recurring expenditure.

2. (a) That the admission shall be made only after adequate infrastructure and all other facilities are provided as per norms and guidelines of the AICTE.

   (b) That the admissions shall be made in accordance with the regulations notified by the Council from time to time.

   (c) That the curriculum of the course, the procedure for evaluation/ assessment of students shall be in accordance with the norms prescribed by the AICTE.

   (d) That the Institution shall not allow closure of the Institution or discontinuation of the course(s) or start any new course(s) or alter intake capacity of seats without the prior approval of the Council.

   (e) That no excess admission shall be made by the Institution over and above the approved intake under any circumstances. In case any excess admission is reported to the Council, appropriate penal action including withdrawal of approval shall be initiated against the Institution.

   (f) That the institutions shall not have any collaborative arrangements with any Indian and/ or Foreign Universities for conduct of technical courses other than those approved by AICTE without obtaining prior approval from AICTE. In case any violation is reported to the Council, appropriate penal action including withdrawal of approval shall be initiated against the Institution.

   (g) That the Institution shall not conduct any course(s) in the field of technical education in the same premises/ campus and / or in the name of the Institution without prior permission/ approval of AICTE. In case any violation is reported to the Council, appropriate penal action including withdrawal of approval shall be initiated against the Institution.

   (h) The institution shall not conduct any non-technical course(s) in the same premises/ campus under any circumstances. In case any violation is reported to the Council, appropriate penal action including withdrawal of approval shall be initiated against the Institution.

3. That the institution shall operate only from the approved location, and that the institution shall not open any off campus study centers/ extension centers directly or in collaboration with any other institution/ university/ organization for the purpose of imparting technical education without obtaining prior approval from the AICTE.

   . That the tuition and other fees shall be charged as per _____ criteria prescribed by the Council from time to time. No capitation fee shall be charged from the students/ guardians of students in any form.

5. That the accounts of the Institution shall be audited annually by a ...... Registered Accountant and shall be open for inspection by the Council or any body or persons authorized b... a

6. That the Director/ Principal and the teaching and other staff shall be selected ..... procedures, qualifications and experience prescribed by the Council from time to time and pa........ as per the norms prescribed by the Council from time to time.

7. (a) That the institution shall furnish requisite returns and reports as desired by AICTE ...... ensure proper maintenance of administrative and academic standards.

   (b) That the technical institution shall publish an information booklet before commencement of the academic year giving details regarding the institution and courses/ programmes being conducted and details of infrastructural facilities including faculty etc. in the form of mandatory disclosure. The information booklet may be made available to the stakeholders of the technical education on cost basis. The mandatory disclosure information shall be put on the Institution Website. The information shall be revised every year with updated information about all aspects of the institution.

   (c) That it shall be mandatory for the technical institution to maintain a Website providing the prescribed information. The Website information must be continuously updated as and when changes take place.

   (d) That a compliance report in the prescribed format along with mandatory disclosures on fulfillment of the above conditions, shall be submitted each year by the Institution within the time limit prescribed by the Council from time to time i.e. 31st August 2009 for the current year.

   (e) That if Technical Institution fails to disclose the information or suppress and/ or misrepresent the information, appropriate action could be initiated including withdrawal of AICTE approval.

8. That all the laboratories, workshops etc. shall be equipped as per the syllabi of the concerned affiliated University and shall be in operational condition before making admissions.

9. That a library shall be established with adequate number of titles, books, journals (both Indian & Foreign) etc as per AICTE norms.

10. That a computer center with adequate number of terminals, Printers etc. shall be established as per AICTE norms.

11. AICTE may carry out random inspections round the year for verifying the status of the Institutions to ensure maintenance of norms and standards.

12. That the AICTE may also conduct inspections with or without notifying the dates to verify specific complaints of mis-representation, violation of norms and standards, mal-practices etc.

13. That the Institution by virtue of the approval given by Council shall not automatically become claimant to any grant-in-aid form the Central or State Government.

14. That in the event of a student/ candidate withdrawing before the starting of the course, the wait listed candidates should be given admission against the vacant seat. The entire fee collected from the student, after a deduction of the processing fee of not more than Rs. 1000/- (Rupees One thousand only) shall be refunded and returned by the Institution / University to the student/ candidate withdrawing from the programme. It would not be permissible for force retention of admitted students (See Public Notice AICTE/ DPG/ 03(01)/2008)

15. The Institute shall take appropriate measures for prevention of ragging in any form, in the light of directions of Supreme Court of India in Writ Petition No. © 656/1998. Incase of failure to prevent the instances of ragging by the Institutions, the Council shall take appropriate action including withdrawal of approval.

F.No.08/04/IIP/PHAR/2008/01
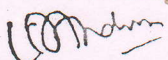
16. That the institution shall provide the following facilities for the physically challenged persons.

   (a) Class rooms, toilets and hostels to be made accessible to wheel chair users.
   (b) Resource room for visually impaired students.
   (c) Accessible Library
   (d) Counseling Centre for disabled students
   (e) Facility of Sign Language Interpreter
   (f) All students needing assistive devices to be provided such devices

17. That the Management shall strictly follow further conditions as may be specified by the Council from time to time.

18. In the event of non-compliance by the **SCHOOL OF PHARMACYVILLAGE BHOJALDISTT. SOLAN - 173230HIMACHAL PRADESH** with regard to guidelines, norms and conditions prescribed from time to time the Council shall be free to take measures for withdrawal of its approval or recognition, without consideration of any related issues and that all liabilities arising out of such withdrawal would solely be that of **SCHOOL OF PHARMACYVILLAGE BHOJALDISTT. SOLAN - 173230HIMACHAL PRADESH.**

Yours faithfully,

(Dr. K.B. Thakur)
Director (M&T)

Copy to:

1. **The Regional OfficerAICTE, North – West Regional Office,Sector – 42 B, Plot No. 1310 Chandigarh - 160036**

2. **The Director of Tech. Education, Vocational & Industrial Training,** Govt. of **Himachal Pradesh Sundernagar - 174401**

3. **The Principal/ Director, SCHOOL OF PHARMACY VILLAGE BHOJALDISTT. SOLAN - 173230HIMACHAL PRADESH**

   (Relevant AICTE regulations / notifications / guidelines pertaining to Admission, Fees and Tuitions Fees waiver schemes are also annexed).

4. **The Registrar,** Concerned University
   (He is requested to complete the process of affiliation for facilitating admissions).

5. **Guard File,** Bureau, AICTE, New Delhi

भारतीय भेषजी परिषद्

(भेषजी अधिनियम, 1948 के अंतर्गत स्थापित)

PHARMACY COUNCIL OF INDIA

(CONSTITUTED UNDER THE PHARMACY ACT, 1948)

तार	Telegram	:	'फार्मकाउंसिल' 'FARMCOUNCIL'
दूरभाष	Telephone	:	23239184, 23231348
फैक्स	Fax	:	011-23239184
ई-मेल	E-Mail	:	pci@ndb.vsnl.net.in
वेबसाईट	Website	:	www.pci.nic.in

संयुक्त परिषद् भवन — Combined Councils' Building
कोटला रोड — Kotla Road
ऐवान-ए-गालिब मार्ग — Aiwan-E-Ghalib Marg
पोस्ट बॉक्स नं. 7020 — Post Box No. 7020
नई दिल्ली - 110002 — New Delhi - 110002

Regd.

Ref.No.32-917/2010-PC/86-88

5 APR 2011

The Principal
School of Pharmacy
Shoolini Institute of Life Sciences and
Business Management. Village Bajhol
Distt. Solan – 173 230
(Himachal Pradesh).

The Registrar
Himanchal Pradesh University
Summer Hill
Shimla – 171 005
(Himanchal Pradesh).

Sub: **Consideration of approval of B.Pharm course & examinations.**

Sir,

This is a reference to the subject cited above. In this connection I am directed to state that matter regarding approval of your institution was placed in 87th Central Council of the PCI in its meeting held in February 2011, which decided as under –

- It was decided to -

  i) grant approval from 2008-2009 to 2011-2012 academic session for 60 admissions for the conduct of Ist. IInd. IIIrd & IVth year B.Pharm course.

  ii) allow 60 admissions for 2011-2012 academic session subject to submission of affiliation fee per annum to the PCI within the stipulated time period.

- It was further decided to inspect the institution for considering final approval u/s 12 of the Pharmacy Act, 1948.

For guidelines regarding "SIF submission last date" and "Affiliation fee", kindly refer to Council's website www.pci.nic.in
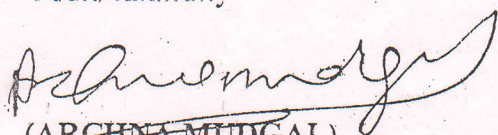
You are requested to follow the instructions of the PCI regarding submission of affiliation fee and Standard Inspection Form (SIF) within the stipulated time period as fixed by the PCI.

...2

It is further directed to submit –

a) duly filled in SIF in triplicate.

b) duly attested affidavit for consideration of approval by the PCI u/s 12 of the Pharmacy Act, 1948 to the effect that –

- Institute will restrict admission to sanctioned intake by PCI & will not admit students beyond sanctioned intake without prior approval of the PCI.
- Institute will not start additional Pharmacy Programme/strat 2nd/evening/ additional shift in the existing pharmacy institution.
- Institution shall comply will statutory norms and standards prescribed by the PCI from time to time.
- The entire consequences of failure to comply with the undertaking shall rest on the institution and PCI in no way shall be responsible for the same.

Yours faithfully

(ARCHNA MUDGAL)
Registrar-cum-Secretary

Cc to –
The Registrar,
Himachal Pradesh Pharmacy Council,
S.D.A. Complex,
SHIMLA – 171 009 (H.P.)

- Please note that –

a) the above approval granted by PCI is only for the conduct of "Course Study".

b) the said approval is -

i) Not a final approval u/s 12 of the Pharmacy Act for the purpose of registration as a pharmacist.

ii) State Pharmacy Council has not to register the students on the basis of above approval of "Course of Study".

c) The State Pharmacy Council shall grant registration to students of above institutions only when the PCI grants final approval u/s 12 of the Pharmacy Act and forwards a copy of notification/communication to this effect to State Pharmacy Council.

(ARCHNA MUDGAL)
Registrar-cum-Secretary

Annexure - VI

List of Programs Offered in Shoolini University

Sr. No	School wise list of programs offered	
	Faculty of Management Sciences and Liberal Arts	
I	**School of Business Management and Liberal Arts**	
1	BBA	
2	B.Com. (Hons)	
3	B.A. (Hons) Economics *	
4	MBA	
5	PhD	Management Science
6		Economics
	Faculty of Engineering and Technology	
II	**School of Mechanical and Civil Engineering**	
7	B.Tech	Mechanical
8		Civil
9		Nanotechnology
10	M.Tech.	Mechanical
11		Civil
12	Dual Degree	B.Tech-M.Tech(Mechanical)
13	Ph.D.	Mechanical
14		Civil
III	**School of Electrical and Computer Science Engineering**	
15	B Tech	ECE
16		EE
17		CSE
18		Bioinformatics
19	M Tech	CSE
20		ECE
21	Dual Degree	B.Tech-MBA
22		B.Tech-M.Tech(CSE)
23		B.Tech-M.Tech(ECE)
24	Ph.D.	ECE
25		CSE
	Faculty of Pharmaceutical Sciences	
IV	**School of Pharmaceutical Sciences**	
26	B Pharmacy	
27	M Pharmacy	Pharmaceutics
28		Pharmacology
29		Pharma Chemistry
30		DRA
31	PhD	Pharmaceutical Sciences
	Faculty of Applied Sciences and Biotechnolgy	
V	**School of Biotechnology**	
32	B Sc (Hons)	Biotechnology
33		Microbiology
34	M Sc	Biotechnology
35		Microbiology
36		Bio Chemistry

37	M.Tech.		Biotechnology
38	Dual Degree		B.Tech-M.Tech (Biotechnology)
39			B.Tech-MBA (Biotechnology)
40	M.Phil		Biotechnology
41			Microbiology
42	Ph D		Biotechnology
43			Microbiology
	School of Bio-Engineering and Food Technology		
44	B Tech		Biotechnology
45			Food Technology
46	Dual Degree		B.Tech-M.Tech(Food Technology)
47	M.Sc.		Food Technology
48	M.Tech.		Food Technology
49	Ph.D.		Food Technology
	Faculty of Basic Sciences		
VII	**School of Biological and Environmental Sciences**		
50	B.Sc (Hons). -M.Sc. Dual Degree		
51	B.Sc. (Hons)		Botany*
52			Zoology*
53	M. Sc.		Botany
54			Zoology *
55			Environment Science
56	M Phil		Botany
57			Environment Science
58			Zoology
59	PhD		Environment Science
60			Zoology
61			Botany
VIII	**School of Chemistry**		
62	B.Sc (Hons). -M.Sc. Dual Degree		
63	B.Sc. (Hons)		Chemistry*
64	M Sc		Chemistry
65			Pharmaceutical Chemistry*
66	M Phil		Chemistry
67	PhD		Chemistry
IX	**School of Physics & Materials Science**		
68	B.Sc (Hons). -M.Sc. Dual Degree		
69	B.Sc. (Hons)		Physics*
70	M Sc		Physics
71	M Phil		Physics
72	PhD		Physics

*Programs to be offered in 2015-16

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.

BALANCE SHEET AS AT 31.03.2014

SOURCES OF FUNDS	SCHEDULE	AMOUNT
UNRESTRICTED FUNDS		
General Fund	D	14,90,65,382.72
LOANS/BORROWINGS		
Secured	E	36,79,79,633.00
Unsecured	F	11,70,23,051.84
NON CURRENT LIABILITIES	G	3,56,01,525.00
CURRENT LIABILITIES AND PROVISIONS	H	2,55,82,997.00
TOTAL		**69,52,52,589.56**
APPLICATION OF FUNDS		
FIXED ASSETS		
Tangible Assets	A	32,92,93,049.40
Capital Work in Progress	A	7,20,25,400.00
CURRENT ASSETS	B	4,61,74,919.32
LOANS AND ADVANCES	C	91,91,157.00
Foundation for Life Sciences & Business Mgt.,		11,72,54,431.84
Construction Division of Shoolini University		12,13,13,632.00
TOTAL		**69,52,52,589.56**
Notes on Accounts	S	

" AUDITOR'S REPORT"
"As per our separate report of even date
For Jagmohan Chohda & Co.,
Chartered Accountants

Place: Solan
Date : 17.07.2014

(Jagmohan Chohda) Prop.
1st Floor, Near Sainik Rest House, The Mall, Solan, H.P.

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31.03.2014

	SCHEDULE	UNRESTRICTED FUNDS GENERAL FUND	RESTRICTED FUNDS	TOTAL
INCOME				
Academic Receipts	I	29,06,81,328.00	0.00	29,06,81,328.00
Grants & Donations	J	1,54,26,951.00	-	1,54,26,951.00
Other Incomes	K	1,21,62,311.36	0.00	1,21,62,311.36
TOTAL(A)		**31,82,70,590.36**	**0.00**	**31,82,70,590.36**
EXPENDITURE				
Grants & Donations	L	1,23,08,081.00	-	1,23,08,081.00
Staff Payments & Benefits	M	12,17,19,717.00		12,17,19,717.00
Academic Expenses	N	1,44,81,057.00		1,44,81,057.00
Administrative & General Exp.	O	5,50,87,178.26		5,50,87,178.26
Transportation Expenses	P	84,94,507.00		84,94,507.00
Repair & Maintenance	Q	41,62,141.00		41,62,141.00
Finance Cost	R	3,59,14,500.87		3,59,14,500.87
Depreciation		1,25,50,217.60		1,25,50,217.60
TOTAL(B)		**26,47,17,399.73**	**-**	**26,47,17,399.73**
Balance being Excess of		5,35,53,190.63	-	5,35,53,190.63
Income over Expenditure(A-B)				
Carried to General Fund				
Notes on Accounts	T			

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.

SCHEDULE-B

DETAIL OF CURRENT ASSETS AS AT 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Sundry Debtors(Fees Recoverable)	1,01,86,661.00
2	Cash in hand	3,78,074.00
3	Deposits with Scheduled Banks(PNB)	14,10,184.32
4	In Term Deposits(PNB)	3,42,00,000.00
		4,61,74,919.32

SCHEDULE-C

DETAIL OF LOANS AND ADVANCES AS AT 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	TDS	5,15,550.00
2	Pre Paid Insurance	2,40,138.00
3	Loans & Advances	84,01,119.00
4	Security Deposits	34,350.00
		91,91,157.00

SCHEDULE-D

DETAIL OF GENERAL FUND AS AT 31.03.2014

S.NO.	PARTICULARS	AMOUNT
	Balance at the Beginning of the Year	8,50,44,192.09
	Additions During The Year	1,00,00,000.00
	Add:Capital Subsidy	4,68,000.00
	Add:Balance of Net Income	5,35,53,190.63
	Balance at the Year End	14,90,65,382.72

SCHEDULE-E

DETAIL OF SECURED TERM LOANS FROM BANK AS AT 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Punjab National Bank-A/C No.-84	10,08,922.00
2	Punjab National Bank-A/C No.-93	23,00,07,441.00
3	Punjab National Bank-A/C No.-39	1,11,64,865.00
4	Punjab National Bank-A/C No.-IB-328	2,44,91,073.00
5	Punjab National Bank-A/C No.-IB-337	58,09,014.00
6	Punjab National Bank-A/C No.-105	4,16,46,879.00
7	Punjab National Bank-A/C No.-IC-75	1,20,73,341.00
8	Punjab National Bank-A/C No.-09300070890	3,93,66,935.00
9	Punjab National Bank-114	7.00
10	STL-Punjab National Bank-A/C No.-FD-6142	24,11,156.00
		36,79,79,633.00

SCHEDULE-F

DETAIL OF UNSECURED LOANS FROM MEMBERS/OTHERS AS AT 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Fixed Unsecured Loans	4,71,41,660.84
2	Short Term Unsecured Loans	6,98,81,391.00
		11,70,23,051.84

SCHEDULE-G
DETAIL OF NON CURRENT LIABILITIES AS AT 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Hostel Security Deposits	60,74,775.00
2	Tution Security Deposit	2,95,26,750.00
	TOTAL	3,56,01,525.00

SCHEDULE-H
DETAIL OF CURRENT LIABILITIES AS AT 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Duties & Taxes	730153.00
2	Provisions	8088951.00
3	Sundry Creditors	3637045.00
4	Fellowship Grants	979959.00
5	Left Students	-591535.00
6	Fees Pending Reconciliation	770606.00
7	H.P.Private Edu. Inst.Regulatory Comm.(L)	2456940.00
8	Refundable Grants	1680000.00
9	Unutilised Grants	7830878.00
10	Suspense	-
		2,55,82,997.00

SCHEDULE-I
DETAIL OF ACADEMIC RECEIPTS FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
	ACADEMIC	
1	Tution Fees	19,84,41,940.00
2	Prospectus Fees	7,84,700.00
3	Registeration Fees	1,47,657.00
4	Development Charges	2,35,50,000.00
	OTHER FEES	
1	Fine/Late Fees	12,72,813.00
2	Transportation Fees	1,01,35,320.00
3	Examination Fees	16,22,823.00
4	Hostel Fees	5,47,26,075.00
		29,06,81,328.00

SCHEDULE-J
DETAIL OF GRANTS AND DONATIONS FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Research Project Income	85,80,706.00
2	Training Project Income	68,46,245.00
		1,54,26,951.00

SCHEDULE-K
DETAIL OF OTHER INCOME FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	SB A/C interest-Scheduled Bank	5,85,009.00
2	FDR Interest-Scheduled Bank	29,07,054.00
3	Misc. Income/Interest Recoverable PNB	63,83,462.36
4	Donations	15,52,778.00
5	Confrence/Table Tennis Championship	3,69,108.00
6	Rent Income	3,64,900.00

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.

SCHEDULE- M

DETAIL OF SALARY/WAGES/HONORARIUM EXPENSES FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Salaries/Wages	11,92,27,994.00
2	Provident Fund	19,13,383.00
3	Honorarium to Guest Faculty	5,78,340.00
		12,17,19,717.00

SCHEDULE- N

DETAIL OF ACADEMIC EXPENSES FOR THE YEAR ENDING 31.03.2014.

S.NO.	PARTICULARS	AMOUNT
1	Laboratory Expenses	23,10,352.00
2	Seminar/Workshop	5,61,959.00
3	Subscription Expenses	9,36,366.00
4	Examination Expenses	12,36,016.00
5	University Programmes	16,28,909.00
6	Internet Charges	15,12,368.00
7	Scholarships	54,79,637.00
8	Sprint Exp.	8,15,450.00
		1,44,81,057.00

SCHEDULE- L

DETAIL OF UTILISED GRANTS FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Research Project Exp.	54,61,836.00
2	Training Project Exp.	68,46,245.00
		1,23,08,081.00

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.

SCHEDULE-O

DETAIL OF ADMINISTRATIVE AND GENERAL EXPENSES FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Water & Electricity	49,00,166.00
2	Rent,Hostel Rent	53,43,967.00
3	Hostel Welfare Exp.	1,70,75,251.00
4	Postage & Telegram	51,172.00
5	Telephone	5,38,635.00
6	Printing & Stationery	11,70,554.00
7	Travelling & Conveyance	18,72,004.52
8	Hospitality	2,65,332.00
9	Legal & Professional Charges	16,60,333.00
10	Advertisement & Publicity	1,60,02,015.00
11	Car Running Exp.	4,24,755.00
12	Freight & Colliage	28,265.00
13	Misc.Exp.	16,01,433.00
14	Admission Cell Exp.	15,06,836.00
15	Affiliation Fees	1,12,360.00
16	Health Centre/Medicines	1,85,437.00
17	Placement Charges	25,514.00
18	UGC Inspection	6,76,646.00
19	Insurance	8,11,441.74
20	Conference Exp.	4,63,308.00
21	Land Scaping & Gardening Exp.	3,71,753.00
		5,50,87,178.26

DETAIL OF TRANSPORTATION EXPENSES FOR THE.   **SCHEDULE-P**
FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Running & Repair & Maintenance	84,94,507.00
		84,94,507.00

SCHEDULE-Q
DETAIL OF REPAIR & MAINTENANCE EXPENSES FOR THE.
FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Repair & Maintenance Exp.	7,12,621.00
2	Sanitation Exp.	29,61,645.00
3	Furnishing of University	4,87,875.00
		41,62,141.00

SCHEDULE-R
DETAIL OF FINANCIAL EXPENSES FOR THE YEAR ENDING 31.03.2014

S.NO.	PARTICULARS	AMOUNT
1	Interest on Loans	3,45,08,000.00
2	Bank Charges	14,06,500.87
		3,59,14,500.87

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES   SLM METHOD

VILLAGE BAJHOL,SOLAN,H.P.

SCHEDULE OF FIXED ASSETS FOR THE YEAR ENDING 31.03.2014   SCHEDULE-A

PARTICULARS	RATE	GROSS BLOCK				DEPRECIATION			NET BLOCK	
		WDV AS AT 01.04.2013	ADDITIONS MORE THAN 6 MONTHS USE	ADDITIONS LESS THAN 6 MONTHS USE	TOTAL	AT THE BEGINNING OF THE YEAR	ON ADDITIONS DURING THE YEAR	TOTAL UP TO YEAR END	WDV AS AT 31.03.2014	WDV AS AT 31.03.2013
Computers	16.21%	1,58,29,143.00	48,36,694.00	39,67,557.00	2,46,33,394.00	43,65,252.00	29,63,895.32	73,29,147.32	1,73,04,246.68	1,14,63,891.00
Buildings	1.63%	22,94,07,981.00	1,19,28,079.00	71,60,735.00	24,84,96,795.00	27,06,995.00	39,48,013.75	66,55,008.75	24,18,41,786.25	22,67,00,986.00
Electric Equipment	9.50%	17,47,156.00	4,46,663.00	7,06,096.00	28,99,915.00	1,31,414.00	2,29,468.04	3,60,882.04	25,39,032.97	16,15,742.00
Fire Fighting Equipment	9.50%	46,210.00	37,537.00	-	83,747.00	9,845.00	7,020.69	16,865.69	66,881.31	36,365.00
Furniture & Fixtures	9.50%	1,87,12,460.00	28,80,472.00	25,19,291.00	2,41,12,223.00	25,45,803.00	19,29,143.58	44,74,946.58	1,96,37,276.42	1,61,66,657.00
Furnishing of Hostel	9.50%	3,60,952.00	-	9,98,000.00	13,58,952.00	67,364.00	75,295.86	1,42,659.86	12,16,292.14	2,93,588.00
Lab Equipments	4.75%	1,76,33,668.00	6,22,191.00	8,58,635.00	1,91,14,494.00	10,59,581.00	8,37,215.79	18,96,796.79	1,72,17,697.21	1,65,74,087.00
Library Books	4.75%	31,17,379.00	14,091.00	10,77,594.00	42,09,064.00	2,14,366.00	1,64,155.30	3,78,521.30	38,30,542.70	29,03,013.00
Office Equipment	9.50%	46,62,562.00	73,729.00	-	47,36,291.00	7,02,753.00	3,83,186.11	10,85,939.11	36,50,351.89	39,59,809.00
Network/Lan	4.75%	5,39,821.00	6,71,795.00	96,178.00	13,07,794.00	17,375.00	59,010.68	76,385.68	12,31,408.33	5,22,446.00
Sports Equipment	4.75%	1,71,950.00	-	33,545.00	2,05,495.00	5,436.00	8,706.11	14,142.11	1,91,352.89	1,66,514.00
Research Project Assets	4.75%	51,56,356.00	-	31,18,870.00	82,75,226.00	1,93,444.00	3,09,811.48	5,03,255.48	77,71,970.52	49,62,912.00
Training Project Exp.	4.75%	73,894.00	-	-	73,894.00	1,755.00	3,426.60	5,181.60	68,712.40	72,139.00
Musical Instruments	4.75%	59,945.00	-	-	59,945.00	1,424.00	2,779.75	4,203.75	55,741.25	58,521.00
Chapati Making Machine	4.75%	4,80,000.00	(4,80,000.00)	-	-	11,400.00	-	11,400.00	-	4,68,600.00
Buses	11.31%	1,89,34,794.00	-	5,00,000.00 (3,55,121.00)	1,90,79,673.00	47,80,828.00	16,29,088.55	64,09,916.55	1,26,69,756.45	1,41,53,966.00
		31,69,34,271.00	2,10,31,251.00	2,06,81,380.00	35,86,46,902.00	1,68,15,035.00	1,25,50,217.60	2,93,65,252.60	32,92,93,049.40	30,01,19,236.00

CAPITAL WORK IN PROGRESS

Advance for Land   72025400.00

72025400.00

JAGMOHAN CHOHDA & CO.
MEM NO. 088952
FRN : 010228N
CHARTERED ACCOUNTANTS

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.
BALANCE SHEET AS AT 31.03.2013

SOURCES OF FUNDS	SCHEDULE	AMOUNT
UNRESTRICTED FUNDS		
General Fund	D	85,512,192.09
LOANS/BORROWINGS		
Secured	E	331,044,190.00
Unsecured	F	114,749,700.84
CURRENT LIABILITIES AND PROVISIONS	G	73,237,280.00
TOTAL		604,543,362.93
APPLICATION OF FUNDS		
FIXED ASSETS		
Tangible Assets	A	300,119,236.00
Capital Work in Progress	A	60,000,000.00
CURRENT ASSETS	B	44,342,165.35
LOANS AND ADVANCES	C	4,301,341.74
Foundation for Life Sciences & Business Mgt.,		115,095,786.84
Construction Division of Shoolini University		80,684,833.00
TOTAL		604,543,362.93
Notes on Accounts	S	

" AUDITOR'S REPORT"
" "As per our separate report of even date."

For Jagmohan Chohda & Co.,
Chartered Accountants

Place:Solan

Date : 16.05.2013

Jagmohan Chohda

(Jagmohan Chohda)Prop.

1st Floor,Near Sainik Rest House,The Mall,Solan,H.P.

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31.03.2013

	SCHEDULE	UNRESTRICTED FUNDS GENERAL FUND	RESTRICTED FUNDS	TOTAL
INCOME				
Academic Receipts	H	238,771,340.00	0.00	238,771,340.00
Grants & Donations	I	14,283,988.00	-	14,283,988.00
Other Incomes	J	4,018,050.00	0.00	4,018,050.00
TOTAL(A)		257,073,378.00	0.00	257,073,378.00
EXPENDITURE				
Grants & Donations	M	9,053,738.00	-	9,053,738.00
Staff Payments & Benefits	K	100,366,134.00		100,366,134.00
Academic Expenses	L	16,318,395.00		16,318,395.00
Administrative & General Exp.	N	44,972,699.26		44,972,699.26
Transportation Expenses	O	7,504,164.00		7,504,164.00
Repair & Maintenance	P	6,618,812.00		6,618,812.00
Finance Cost	Q	13,311,633.65		13,311,633.65
Depreciation		10,160,675.00		10,160,675.00
TOTAL(B)		208,306,250.91	-	208,306,250.91
Balance being Excess of Income over Expenditure(A-B) Carried to General Fund		48,767,127.09	-	48,767,127.09
Notes on Accounts	S			

" AUDITOR'S REPORT"

"As per our separate report of even date."

For Jagmohan Chohda & Co.,

Chartered Accountants

Place:Solan

Date : 16.05.2013

Jagmohan Chohda

(Jagmohan Chohda)Prop.

1st Floor,Near Sainik Rest House,The Mall,Solan,H.P.

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE-B

DETAIL OF CURRENT ASSETS AS AT 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Sundry Debtors(Fees Recoverable)	5,590,130.71
2	Cash in hand	52,966.00
3	Deposits with Scheduled Banks(PNB)	4,499,068.64
4	In Term Deposits(PNB)	34,200,000.00
		44,342,165.35

SCHEDULE-C

DETAIL OF LOANS AND ADVANCES AS AT 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	TDS	280,863.00
2	Pre Paid Insurance	269,561.74
3	Loans & Advances	2,098,501.00
4	Advances with Suppliers	1,618,066.00
5	Security Deposits	34,350.00
		4,301,341.74

SCHEDULE-D

DETAIL OF GENERAL FUND AS AT 31.03.2013

S.NO.	PARTICULARS	AMOUNT
	Balance at the Beginning of the Year	28,042,048.00
	Add:Capital Subsidy	468,000.00
	Add:Depreciation Written Back	8,235,017.00
	Add:Balance of Net Income	48,767,127.09
	Balance at the Year End	85,512,192.09

SCHEDULE-E

DETAIL OF SECURED TERM LOANS FROM BANK AS AT 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Punjab National Bank-A/C No.-84	1,817,881.00
2	Punjab National Bank-A/C No.-93	244,055,599.00
3	Punjab National Bank-A/C No.-39	16,356,756.00
4	Punjab National Bank-A/C No.-IB-328	32,662,815.00
5	Punjab National Bank-A/C No.-IB-337	7,941,551.00
6	Punjab National Bank-A/C No.-NF-62	2,057,632.00
7	Punjab National Bank-A/C No.-IC-75	18,374,642.00
8	Punjab National Bank-A/C No.-09300070890	5,384,476.00
9	STL-Punjab National Bank-A/C No.-6142	2,392,838.00
		331,044,190.00

SCHEDULE-F

DETAIL OF UNSECURED LOANS FROM MEMBERS/OTHERS AS AT 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Fixed Unsecured Loans	40,132,426.84
2	Short Term Unsecured Loans	74,617,274.00
		114,749,700.84

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE-G

DETAIL OF CURRENT LIABILITIES AS AT 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Hostel Security Deposits	5,280,750.00
2	Fees Pending Reconciliation	342,410.00
3	H.P.Private Edu.Ins.Reg.Comm	562,520.00
4	Duties & Taxes	100,675.00
5	Unutilised Grants	4,426,612.00
6	Sundry Creditors	13,959,414.00
7	Left Students Payable	(236,283.00)
8	Fellow Ship Grants-Payable	1,222,550.00
9	Expenses Payable	10,123,961.00
10	Advance Fee Received(2013-14)	12,872,421.00
11	Students(Institute),Security Deposits	24,582,250.00
		73,237,280.00

SCHEDULE-H

DETAIL OF ACADEMIC RECEIPTS FOR THE
PERIOD ENDING 31.03.2013

S.NO.	PARTICULARS	AMOUNT
	ACADEMIC	
1	Tution Fees	166,110,493.00
2	Prospectus Fees	830,150.00
3	Registeration Fees	320,369.00
4	Development Charges	19,290,000.00
	OTHER FEES	
1	Fine/Late Fees	487,284.00
2	Transportation Fees	8,399,214.00
3	Examination Fees	916,040.00
4	Detained Student Fees	181,000.00
5	Hostel Fees	42,236,790.00
		238,771,340.00

DETAIL OF GRANTS AND DONATIONS FOR THE
YEAR ENDING 31.03.2013

SCHEDULE-I

S.NO.	PARTICULARS	AMOUNT
1	Research Project Income	7,615,938.00
2	Training Project Income	6,668,050.00
		14,283,988.00

DETAIL OF OTHER INCOME FOR THE
YEAR ENDING 31.03.2013

SCHEDULE-J

S.NO.	PARTICULARS	AMOUNT
1	SB A/C interest-Scheduled Bank	784,575.00
2	FDR Interest-Scheduled Bank	2,815,129.00
3	Misc. Income	154,997.00
4	Insurance Claim	17,013.00
5	Rent Income	246,336.00
		4,018,050.00

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE-K

DETAIL OF SALARY/WAGES/HONORARIUM EXPENSES FOR THE YEAR ENDING 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Salaries/Wages	97,863,995.00
2	Provident Fund	2,098,532.00
3	Honorarium to Guest Faculty	403,607.00
		100,366,134.00

SCHEDULE-L

DETAIL OF ACADEMIC EXPENSES FOR THE. YEAR ENDING 31.03.2013.

S.NO.	PARTICULARS	AMOUNT
1	Laboratory Expenses	3,492,457.00
2	Seminar/Workshop	575,219.00
3	Subscription Expenses	335,493.00
4	Examination Expenses	1,244,969.00
5	University Programmes	731,417.00
6	Internet Charges	535,489.00
7	Scholarships	9,130,744.00
8	Sprint MBA	272,607.00
		16,318,395.00

SCHEDULE-M

DETAIL OF UTILISED GRANTS FOR THE YEAR ENDING 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Research Project Exp.	2,459,582.00
2	Training Project Exp.	6,594,156.00
		9,053,738.00

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE-N

DETAIL OF ADMINISTRATIVE AND GENERAL EXPENSES FOR THE YEAR ENDING 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Water & Electricity	3,299,264.00
2	Rent, Hostel Rent	5,094,156.00
3	Hostel Welfare Exp.	14,110,643.00
4	Postage & Telegram	65,394.00
5	Telephone	505,640.00
6	Printing & Stationery	894,927.00
7	Travelling & Conveyance	1,287,425.00
8	Hospitality	367,127.00
9	Legal & Professional Charges	1,747,903.00
10	Advertisement & Publicity	12,828,225.00
11	Car Running Exp.	645,349.00
12	Freight & Colliage	173,783.00
13	Misc.Exp.	753,868.00
14	Admission Cell Exp.	1,108,916.00
15	Security Service	117,150.00
16	Health Centre/Medicines	137,164.00
17	Placement Charges	466,630.00
18	Sports Activity Centre	144,194.00
19	Insurance	502,769.26
20	Affiliation Fees AICET/PCI	316,050.00
21	Pollution Control Exp.	67,413.00
22	Land Scaping & Gardening Exp.	338,709.00
		44,972,699.26

DETAIL OF TRANSPORTATION EXPENSES FOR THE.   SCHEDULE-O
FOR THE YEAR ENDING 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Running & Repair & Maintenance	7,504,164.00
		7,504,164.00

SCHEDULE-P

DETAIL OF REPAIR & MAINTENANCE EXPENSES FOR THE.
FOR THE YEAR ENDING 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Repair & Maintenance Exp.	2,090,962.00
2	Sanitation Exp.	2,910,887.00
3	Furnishing of University	1,616,963.00
		6,618,812.00

SCHEDULE-Q

DETAIL OF FINANCIAL EXPENSES FOR THE YEAR ENDING 31.03.2013

S.NO.	PARTICULARS	AMOUNT
1	Interest Term Loans	6,471,878.00
2	Interest Unsecured Loans	6,708,948.00
3	Bank Charges	130,807.65
		13,311,633.65

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES   SLM METHOD

VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE OF FIXED ASSETS FOR THE YEAR ENDING 31.03.2013

SCHEDULE-A

PARTICULARS	RATE	GROSS BLOCK				DEPRECIATION			NET BLOCK	
		WDV AS AT 01.04.2012	ADDITIONS MORE THAN 6 MONTHS USE	ADDITIONS LESS THAN 6 MONTHS USE	TOTAL	AT THE BEGINNING OF THE YEAR	ON ADDITIONS DURING THE YEAR	TOTAL UP TO YEAR END	WDV AS AT 31.03.2013	WDV AS AT 31.03.2012
...ers	16.21%	10,384,741.00	3,459,034.00	1,985,368.00	15,829,143.00	1,960,262.00	2,404,990.00	4,365,252.00	11,463,891.00	8,424,479.00
...s	1.63%	51,369,298.00	-	178,038,683.00	229,407,981.00	418,660.00	2,288,335.00	2,706,995.00	226,700,986.00	50,950,638.00
...Equipment	9.50%	285,877.00	279,571.00	1,181,708.00	1,747,156.00	21,566.00	109,848.00	131,414.00	1,615,742.00	264,311.00
...ting Equipment	9.50%	40,267.00	-	5,943.00	46,210.00	5,738.00	4,107.00	9,845.00	36,365.00	34,529.00
...e & Fixtures	9.50%	12,856,226.00	3,133,598.00	2,722,636.00	18,712,460.00	897,445.00	1,648,358.00	2,545,803.00	16,166,657.00	11,958,781.00
...ng of Hostel	9.50%	353,567.00	1,310.00	6,075.00	360,952.00	33,362.00	34,002.00	67,364.00	293,588.00	320,205.00
...pments	4.75%	8,241,799.00	5,269,966.00	4,121,903.00	17,633,668.00	319,877.00	739,704.00	1,059,581.00	16,574,087.00	7,921,922.00
...ooks	4.75%	2,384,564.00	246,997.00	485,818.00	3,117,379.00	77,829.00	136,537.00	214,366.00	2,903,013.00	2,306,735.00
...quipment	9.50%	3,402,394.00	828,419.00	431,749.00	4,662,562.00	280,318.00	422,435.00	702,753.00	3,959,809.00	3,122,076.00
...Lan	4.75%	-	191,756.00	348,065.00	539,821.00	-	17,375.00	17,375.00	522,446.00	-
...quipment	4.75%	-	56,950.00	115,000.00	171,950.00	-	5,436.00	5,436.00	166,514.00	-
...Project Assets	4.75%	-	2,988,683.00	2,167,673.00	5,156,356.00	-	193,444.00	193,444.00	4,962,912.00	-
...Project Exp	4.75%	-	-	73,894.00	73,894.00	-	1,755.00	1,755.00	72,139.00	-
...struments	4.75%	-	59,945.00	-	59,945.00	-	1,424.00	1,424.00	58,521.00	-
...aking Machine	4.75%	-	-	480,000.00	480,000.00	-	11,400.00	11,400.00	468,600.00	-
	11.31%	18,934,794.00			18,934,794.00	2,639,303.00	2,141,525.00	4,780,828.00	14,153,966.00	16,295,491.00
		108,253,527.00	16,516,229.00	192,164,515.00	316,934,271.00	6,654,360.00	10,160,675.00	16,815,035.00	300,119,236.00	101,599,167.00

Depreciation as per wdv Basis   14,889,377.00

Depreciation Written Back   8,235,017.00

WORK IN PROGRESS

...for Land

60000000

60000000

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.
BALANCE SHEET AS AT 31.03.2012

SOURCES OF FUNDS	SCHEDULE	AMOUNT
UNRESTRICTED FUNDS		
General Fund	D	28,042,048.00
LOANS/BORROWINGS		
Secured	E	231,791,944.00
Unsecured	F	58,164,804.84
CURRENT LIABILITIES AND PROVISIONS	G	50,159,200.00
UNUTILISED GRANTS	H	1,429,217.00
TOTAL		369,587,213.84
APPLICATION OF FUNDS		
FIXED ASSETS		
Tangible Assets	A	73,294,450.00
CURRENT ASSETS	B	54,418,203.00
LOANS AND ADVANCES	C	14,146,316.00
Foundation for Life Sciences & Business Mgt.,		120,101,851.84
Construction Division of Shoolini University		107,626,393.00
TOTAL		369,587,213.84
Notes on Accounts	R	

AUDITOR'S REPORT
" As per our separate report of even date."
For Jagmohan Chohda & Co.,
Place:Solan   Chartered Accountants
Date :20.07.2012

(Jagmohan Chohda)Prop.
1st Floor,Near Sainik Rest House,The Mall,Solan,H.P.

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31.03.2012

	SCHEDULE	UNRESTRICTED FUNDS GENERAL FUND	RESTRICTED FUNDS	TOTAL
INCOME				
Academic Receipts	I	161,763,016.00	0.00	161,763,016.00
Grants & Donations	J	2,700,455.00	9,209,945.00	11,910,400.00
Other Incomes	K	4,510,799.00	0.00	4,510,799.00
TOTAL(A)		168,974,270.00	9209945.00	178,184,215.00
EXPENDITURE				
Grants & Donations			9,209,945.00	9,209,945.00
Staff Payments & Benefits	L	67,997,244.00		67,997,244.00
Academic Expenses	M	11,027,455.00		11,027,455.00
Administrative & General Exp.	N	28,647,453.00		28,647,453.00
Transportation Expenses	O	4,807,341.00		4,807,341.00
Repair & Maintenance	P	1,671,418.00		1,671,418.00
Finance Cost	Q	32,734,826.00		32,734,826.00
Depreciation	A	10,807,788.00		10,807,788.00
TOTAL(B)		157,693,525.00	9,209,945.00	166,903,470.00
Balance being Excess of Income over Expenditure(A-B) Carried to General Fund		11,280,745.00	-	11,280,745.00
Notes on Accounts	R			

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.

SCHEDULE-B

DETAIL OF CURRENT ASSETS AS AT 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Sundry Debtors(Fees Recoverable)	3,713,855.00
2	Deposits with Scheduled Banks(PNB)	
	IN Savings Bank(PNB)	10,587,240.00
	In Current Account(PNB)	5,917,108.00
	In Term Deposits(PNB)	34,200,000.00
	TOTAL	54,418,203.00

SCHEDULE-C

DETAIL OF LOANS AND ADVANCES AS AT 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Staff	1,225,202.00
2	Prepaid Exp.	76,751.00
3	Advances with Suppliers/Others	12,622,363.00
4	Security Deposits	222,000.00
	TOTAL	14,146,316.00

SCHEDULE-D

DETAIL OF GENERAL FUND AS AT 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Balance at the Beginning of the Year	16,761,303.00
2	Add:Balance of net Income	11,280,745.00
3	Balance at the Year End	28,042,048.00

SCHEDULE-E

DETAIL OF SECURED TERMLOANS FROM BANK AS AT 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Punjab National Bank-A/C No.-84	2,572,215.00
2	Punjab National Bank-A/C No.-93	120,806,048.00
3	Punjab National Bank-A/C No.-39	24,287,259.00
4	Punjab National Bank-A/C No.-IB-328	40,477,613.00
5	Punjab National Bank-A/C No.-IB-337	9,896,381.00
6	Punjab National Bank-A/C No.-IC-57	521,802.00
7	Punjab National Bank-A/C No.-NF-62	6,187,869.00
8	Punjab National Bank-A/C No.-IC-75	24,287,258.00
9	Punjab National Bank-A/C No:-09300070890	(251,642.00)
10	STL-Punjab National Bank-A/C No.-6142	3,007,141.00
	TOTAL	231,791,944.00

SCHEDULE-F

DETAIL OF UNSECURED LOANS FROM OTHERS AS AT 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Mr.Ashok Anand	911,657.80
2	Ashok Kumar & Sons(HUF)	4,355,205.53
3	Mr.Gagan Anand	1,185,889.34
4	Mr.Satish Anand	451,444.80
5	Satish Kumar & Sons(HUF)	3,999,590.93
6	Mrs.Manorama Anand	1,541,920.94
7	Mrs.Rita Anand	33,446.60
8	Mrs.Sudesh Kumari	42,402.62
9	Mr.Vishal Anand	701,061.30
10	Mr.Mehan	9,181,311.94
11	Mr.Ashish Khosla	63,409.00
12	Mr.Atul Khosla	38,042.00
13	Mrs.Saroj Khosla	4,633,468.04
	SHORT TERMA LOANS	
14	Ashok Kumar & Sons(HUF)	5,390,643.00
15	Satish Kumar & Sons(HUF)	4,775,963.00
16	Vishal Anand	1,812,449.00
17	Ashok Anand	1,212,193.00
18	Gagan Anand	640,606.00
19	Satish Anand	1,099,060.00
20	Mrs.Manorama Anand	238,502.00
21	Mrs.Rita Anand	1,188,419.00
22	Mr.Mehan	5,037,754.00
23	Mr.Ashish Khosla	2,756,231.00
24	Mr.Atul Khosla	4,250,550.00
25	Mrs.Saroj Khosla	1,286,372.00
26	Prof.P.K.Khosla	1,337,212.00
	TOTAL	58,164,804.84

SCHEDULE-G

DETAIL OF CURRENT LIABILITIES AS AT 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Salary Payable	5,214,786.00
2	Hostel Security Deposits	3,255,000.00
3	Advance Fees Received from Students	24,506,414.00
4	Fees Pending Reconciliation	80,000.00
5	Unutilised Grant-Project Inspire	-
6	Students(Institute)	17,103,000.00
	TOTAL	50,159,200.00

SCHEDULE-H

DETAIL OF UNUTILISED GRANTS AS AT 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Grants Received-Inspire	10,639,162.00
2	Grants Utilised	9,209,945.00
	Balance At at 31.03.2012	1,429,217.00

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE-I

DETAIL OF ACADEMIC RECEIPTS FOR THE
YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
	ACADEMIC	
1	Tution Fees	110,839,038.00
2	Admission Fees	82,100.00
3	Prospectus Fees	827,200.00
4	Registeration Fees	37,700.00
5	Development Charges	15,500,000.00
	OTHER FEES	
1	Fine/Late Fees	389,685.00
2	Transportation Fees	6,837,153.00
3	Hostel Fees	27,250,140.00
	TOTAL	161,763,016.00

DETAIL OF GRANTS AND DONATIONS FOR THE   SCHEDULE-J
YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Grants Received-Inspire	10,639,162.00
2	Grants Unutilised	1,429,217.00
	Grants Utilised during the Year	9,209,945.00

DETAIL OF OTHER INCOME FOR THE   SCHEDULE-K
YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	SB A/C interest-Scheduled Bank	520,214.00
2	FDR Interest-Scheduled Bank	2,841,253.00
3	Misc. Income	67,200.00
4	Rent Income	859,200.00
5	Training Cum-Seminar Fees	222,932.00
	TOTAL	4,510,799.00

DETAIL OF SALARY/WAGES/HONORARIUM EXPENSES FOR THE
YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Salaries	62,713,626.00
2	Wages	3,072,708.00
3	Privident Fund	1,669,660.00
4	Honorarium to Guest Faculty	541,250.00
	TOTAL	67,997,244.00

DETAIL OF ACADEMIC EXPENSES FOR THE
YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Laboratory Expenses	2,805,401.00
2	Seminar/Workshop	975,243.00
3	Subscription Expenses	240,152.00
4	Examination Expenses	511,837.00
5	University Programmes	484,375.00
6	Internet Charges	465,204.00
7	Scholarships	4,791,725.00
8	Net Working/Installations	753,518.00
	TOTAL	11,027,455.00

DETAIL OF ADMINISTRATIVE AND GENERAL EXPENSES FOR THE YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Water & Electricity	1,921,576.00
2	Rent,Hostel Rent	5,786,210.00
3	Postage & Telegram	125,554.00
4	Telephone	295,636.00
5	Printing & Stationery	702,151.00
6	Travelling & Conveyance	497,334.00
7	Hospitality	192,022.00
8	University Membership	90,823.00
9	Legal & Professional Charges	282,874.00
10	Advertisement & Publicity	8,113,757.00
11	Car Running Exp.	523,506.00
12	Freight & Colliage	71,615.00
13	Misc.Exp.	496,634.00
14	Admission Cell Exp.	900,784.00
15	Gardening Exp,	51,480.00
16	Inspection Charges	196,877.00
17	Health Centre/Medicines	45,882.00
18	Placement Charges	137,393.00
19	Sports Activity Centre	113,142.00
20	Insurance	199,151.00
21	Affiliation Fees AICET	198,000.00
22	Hostel Welfare Expenses	7,662,291.00
23	WebSite Expenses	42,761.00
	TOTAL	28,647,453.00

DETAIL OF TRANSPORTATION EXPENSES FOR THE   SCHEDULE-O
YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Running & Repair & Maintenance	4,807,341.00
	TOTAL	4,807,341.00

DETAIL OF REPAIR & MAINTENANCE EXPENSES FOR THE
YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Repair & Maintenance Exp.	508,556.00
2	Sanitation Exp.	460,442.00
3	Furnishing of University	702,420.00
	TOTAL	1,671,418.00

DETAIL OF FINANCIAL EXPENSES FOR THE YEAR ENDING 31.03.2012

S.NO.	PARTICULARS	AMOUNT
1	Interest Term Loans	22,977,153.00
2	Interest Unsecured Loans	6,030,909.00
3	Bank Charges	3,726,764.00
	TOTAL	32,734,826.00

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES

VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE-A

SCHEDULE OF FIXED ASSETS FOR THE PERIOD ENDING 31.03.2012

PARTICULARS	RATE	GROSS BLOCK				DEPRECIATION			NET BLOCK	
		WDV AS AT 01.04.2011	ADDITIONS MORE THAN 6 MONTHS USE	ADDITIONS LESS THAN 6 MONTHS USE	TOTAL	AT THE BEGINNING OF THE YEAR	ON ADDITIONS DURING THE YEAR	TOTAL UP TO YEAR END	WDV AS AT 31.03.2012	WDV AS AT 31.03.2011
...mputers	60%	5,916,914.00	3,755,849.00	711,978.00	10,384,741.00	1,775,074.00	4,952,206.00	6,727,280.00	3,657,461.00	4,141,840.00
...ildings (d. From Capital WIP)	10%	-	-	30,243,298.00	30,243,298.00	-	1,512,165.00	1,512,165.00	28,731,133.00	
...ctric Equipment	10%	69,872.00	28,399.00	187,606.00	285,877.00	3,494.00	18,858.00	22,352.00	263,525.00	66,378.00
...e Fighting Equipment	10%	40,267.00	-		40,267.00	2,013.00	3,825.00	5,838.00	34,429.00	38,254.00
...rniture & Fixtures	10%	1,810,014.00	2,397,322.00	8,648,890.00	12,856,226.00	181,001.00	835,078.00	1,016,079.00	11,840,147.00	1,629,013.00
...rnishing of Hostel	10%	-	348,792.00	4,775.00	353,567.00	-	35,118.00	35,118.00	318,449.00	
...o Equipments	15%	2,603,439.00	19,797.00	5,618,563.00	8,241,799.00	195,258.00	406,336.00	601,594.00	7,640,205.00	2,408,181.00
...rary Books	15%	273,001.00	346,404.00	1,765,159.00	2,384,564.00	20,475.00	221,226.00	241,701.00	2,142,863.00	252,526.00
...ce Equipment	10%	1,068,031.00	362,992.00	1,971,371.00	3,402,394.00	53,402.00	236,331.00	289,733.00	3,112,661.00	1,014,629.00
...ses	15%	10,594,296.00	6,548,650.00	1,791,848.00	18,934,794.00	794,572.00	2,586,645.00	3,381,217.00	15,553,577.00	9,799,724.00
		22,375,834.00	13,808,205.00	50,943,488.00	87,127,527.00	3,025,289.00	10,807,788.00	13,833,077.00	73,294,450.00	19,350,545.00
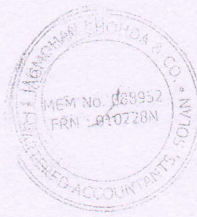
SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.
BALANCE SHEET AS AT 31.03.2011

LIABILITIES	TOTAL	ASSETS	TOTAL
CAITAL FUND		FIXED ASSETS(wdv)	19,350,545.00
		(Schedule-A)	
RESERVES & SURPLUSES			
Opening Bal. 2394550.00		Building Under Construction	21,774,898.00
For the year -8009081		(Schedule-B)	
Add:Capital Exp. +22375834.00	16,761,303.00		
		CURRENT ASSETS	
SECURED LOANS	121,326,417.00	AND LOANS AND	
(Schedule-F)		ADVANCES	
UNSECURED LOANS	56,191,529.84	Cash & Bank Balances	
(As Per Sch-G)		(Schedule-C)	8,560,159.00
		FDR	34,200,000.00
CURRENT LIABILITIES &		Fees Recoverable from	3,666,575.00
PROVISIONS		Students	
Security Deposits Students	11,052,000.00	(Schedule-D)	
(Refundable)			
(Schedule-H)		Advances	503,637.00
Advance Fees Received	12,819,786.00	(Schedule-E)	
(Schedule-I)			
Sundry Creditors(Net)	976,788.00		
(Schedule-J)			
Fees Pending Reconciliation	5,000.00	**Foundation for Life Scienes**	131,077,009.84
		& Business Management	
	219,132,823.84		219,132,823.84

AUDITOR'S REPORT
" As per our separate report of even date
For Jagmohan Chohda & Co.,
Chartered Accountants

Place:Solan
Date :09.05.2011

(Jagmohan Chohda)Prop.
1st Floor, Near Sainik Rest House, The Mall, Solan, H.P.

JAGMOHAN CHOHDA & CO.
MEM No. 088952
FRN : 010228N
CHARTERED ACCOUNTANTS, SOLAN

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31.03.2011

PARTICULARS	AMOUNT	PARTICULARS	AMOUNT
To Advertisement Exp.	2,131,513.00	By Income from Fees	64,138,070.00
To Electricity & Water	326,040.00	(Fees,Brouchure etc.)	
To Bus Ruuning/Maint.Exp.	824,639.00	By Hostel Fees	15,147,400.00
To Hostel Exp.	4,768,789.00	By Misc. Income	157,215.00
To Lab Chemicals & Glassware	1,155,379.00	By Grants from MP	200,000.00
To Rent	839,600.00	By Fine,Class Attendence Fee	37,661.00
To Examination Charges	130,383.00	By Rent Income	6,000.00
To Inspire Project Exp.	5,232,402.00	By Interest SB A/C	337,575.00
To Inspection Charges	323,316.00	By Grant-Inspire Project	3,400,000.00
		By Registeration Fees	343,600.00
To Travelling,Stationery,Gen.Exp.	1,550,510.00	By Interest Income of FDR	1,443,000.00
(Schedule-L)		By Prospectus Sale	834,100.00
To Salary & Wages,Honorarium	39,026,016.00	By Bus Charges Recovered	3,535,365.00
(Schedule-M)			
To Telephone/Lanning,Networking Exp.	2,929,466.00		
(Schedule-N)			
To Financial Exp.	12,949,891.00		
(Schedule-O)			
To Depreciation	3,025,289.00		
(Schedule-A)			
To Surplus c/d	14,366,753.00		
	89,579,986.00		89,579,986.00
To Capital Expenditure-Schedule-A	22,375,834.00	By Surplus b/f	14,366,753.00
		By Excess of Expenditure over Income	8,009,081.00
	22,375,834.00		22,375,834.00

AUDITOR'S REPORT   (Notes Forming part of Audit Report as per Annx.)
" As per our separate report of even date."
For Jagmohan Chohda & Co.,
Chartered Accountants

Place:Solan
Date :09.05.2011

(Jagmohan Chohda)Prop.
1st Floor,Near Sainik Rest House,The Mall,Solan,H.P.

MEM No. 088952
FRN : 010228N

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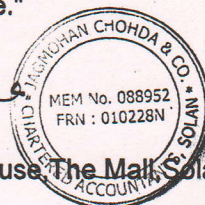
SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.

SCHEDULE-B
DETAIL OF CAPITAL WORK IN PROGRESS AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Shoolini University	21,774,898.00
		21,774,898.00

SCHEDULE-C
DETAIL OF CASH AND BANK BALANCES AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT
	FLSBM	
1	Cash in Hand	152,800.00
2	Punjab National Bank(Foundation for Life)	4,817,049.00
3	Punjab National Bank(Foundation for Life)(Corpus)	650,555.00
4	PNB,Shoolini University-construcion	4,645.00
5	PNB,Shoolini University-Fees	544,247.00
6	PNB,Shoolini University of Biotech & Bus.Mgt.	2,390,863.00
		8,560,159.00

SCHEDULE-D
DETAIL OF FEE RECOVERABLE FROM STUDENTS AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Students-2009-10	1,614,225.00
2	Students-2010-11	2,162,350.00
3	Students-2011-12	(110,000.00)
		3,666,575.00

1+2+4 350-13,94,225
-22,82,350

JAGMOHAN CHOHDA & CO.
MEM No. 088952
FRN 010228N
CHARTERED ACCOUNTANTS, SOLAN

4

SCHEDULE-E

DETAIL OF ADVANCES AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT DEBIT	AMOUNT CREDIT
1			-
		-	-

Net Balance   Debit   -

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE-F

DETAIL OF SECURED LOANS AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Punjab National Bank-A/C No.-84	3,375,452.00
2	Punjab National Bank-A/C No.-39	33,542,961.00
3	Punjab National Bank-A/C No.-IB-328	29,096,466.00
4	Punjab National Bank-A/C No.-IC-57	1,344,942.00
5	Punjab National Bank-A/C No.-NF-62	10,242,468.00
6	Punjab National Bank-A/C No.-IC-75	30,708,998.00
7	Punjab National Bank-A/C No.-09300070890	9,912,045.00
8	STL-Punjab National Bank-A/C No.-6142	3,103,085.00
		121,326,417.00

SCHEDULE-G

DETAIL OF UNSECURED LOANS AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Mr.Ashok Anand	977,226.80
2	Ashok Kumar & Sons(HUF)	4,668,440.53
3	Mr.Gagan Anand	1,271,180.34
4	Mr.Satish Anand	483,912.80
5	Satish Kumar & Sons(HUF)	4,287,248.93
6	Mrs.Manorama Anand	1,652,818.94
7	Mrs.Rita Anand	35,852.60
8	Mrs.Sudesh Kumari	45,452.62
9	Mr.Vishal Anand	751,482.30
10	Mr.Mehan	9,181,311.94
11	Mr.Ashish Khosla	67,968.00
12	Mr.Atul Khosla	40,780.00
13	Mrs.Saroj Khosla	4,966,714.04
	SHORT TERMA LOANS	
14	Ashok Kumar & Sons(HUF)	4,005,817.00
15	Satish Kumar & Sons(HUF)	3,411,152.00
16	Vishal Anand	1,753,432.00
17	Ashok Anand	1,172,721.00
18	Gagan Anand	619,747.00
19	Satish Anand	1,063,273.00
20	Mrs.Manorama Anand	230,737.00
21	Mrs.Rita Anand	1,149,723.00
22	Mr.Mehan	5,037,754.00
23	Mr.Ashish Khosla	2,666,484.00
24	Mr.Atul Khosla	4,112,144.00
25	Mrs.Saroj Khosla	1,244,486.00
26	Prof.P.K.Khosla	1,293,670.00
		56,191,529.84

5

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.

SCHEDULE-H
DETAIL OF SECURITY DEPOSITS(REFUNDABLE) AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Students(Hostel)	1,945,000.00
2	Students(Institute)	9,107,000.00
		11,052,000.00

SCHEDULE-I
DETAIL OF FEES RECEIVED IN ADVANCE AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT
	For 2011-12	12,819,786.00
		12,819,786.00

SCHEDULE-J
DETAIL OF CREDITORS/ADVANCES AS AT 31.03.2011

S.NO.	PARTICULARS	AMOUNT DEBIT	AMOUNT CREDIT
1	Adarsh Scintific Industries	-	138,414.00
2	Archohm Consultants(Architectral)		5,000.00
3	Ashwani Aggarwal	100,000.00	
4	CBS Publishers & Distributors		6,970.00
5	Chalk Pad Technologies P.Ltd.		110,000.00
6	Chauhan Electricals		1,920.00
7	Geeta Advertising Agency		165,286.00
8	Himachal Khadi Ashram		12,440.00
9	Himachal Studio		1,935.00
10	JCBL Limited		594,277.00
11	Lotus International	200,000.00	
10	Johri Lal Bansi Dhar		6,355.00
11	Shoolini Stationers & Copier		34,191.00
12	S.S. Exhibitions & Media Pvt.Ltd.	150,000.00	
13	Surjeet Catering Services		350,000.00
		450,000.00	1,426,788.00

Net Balance(1426788-450000.00)   Credit   976,788.00

SCHEDULE-K

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL,SOLAN,H.P.

SCHEDULE-L

DETAIL OF GENERAL/MISCELANOUS EXPENSES FOR THE YEAR ENDING 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Freight & Cooliage Charges	19,690.00
2	Car Running Exp.	91,562.00
3	Health Centre & Medicines	42,261.00
4	Insurance	134,878.00
5	Legal & Professional Charges	2,176.00
6	Misc.Exp.	228,933.00
7	Printing & Stationery	279,304.00
8	Library & Journal Exp.	62,925.00
9	Postage Exp.	26,131.00
10	Repair & Maintenance,	38,180.00
11	Travelling Exp.	238,225.00
12	Website Exp.	213,990.00
13	Workshop,Industrial Visit & Education Tour Exp.	82,255.00
14	Scholarships	90,000.00
		1,550,510.00

SCHEDULE-M

DETAIL OF SALARY/WAGES/HONORARIUM EXPENSES FOR THE YEAR ENDING 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Honorarium to Guest Faculty	12,950.00
2	Salaries	38,488,651.00
3	Wages	524,415.00
		39,026,016.00

SCHEDULE-N

DETAIL OF TELEPHONE/NETWORKING,INTERNET EXPENSES ETC. FOR THE YEAR ENDING 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Installation/Laning & Networking Exp.	2,637,594.00
2	Internet Charges	247,790.00
3	Telephone Exp.	44,082.00
		2,929,466.00

SCHEDULE-O

DETAIL OF FINANCIAL EXPENSES FOR THE YEAR ENDING 31.03.2011

S.NO.	PARTICULARS	AMOUNT
1	Bank Charges	73,484.00
2	Interest on Bank STL-FDR Loan	157,615.00
3	PNB Bus Loan	336,085.00
4	PNB Capt. Loan	6,621,369.00
5	PNB Limit	204,915.00
6	Interest on Unsecured Loans	5,556,423.00
		12,949,891.00

JAGMOHAN CHOHDA & CO.
MEM No. 088952
FRN : 010228N
CHARTERED ACCOUNTANTS, SOLAN

SHOOLINI UNIVERSITY OF BIOTECH & MANAGEMENT SCIENCES
VILLAGE BAJHOL, SOLAN, H.P.

SCHEDULE-A

SCHEDULE OF FIXED ASSETS FOR THE PERIOD ENDING 31.03.2011

PARTICULARS	RATE	WDV AS AT 01.04.2010	ADDITIONS MORE THAN 6 MONTHS USE	ADDITIONS LESS THAN 6 MONTHS USE	TOTAL	DEPRECIATION	WDV AS AT 31.03.2011
...uters	60%	-	-	5,916,914.00	5,916,914.00	1,775,074.00	4,141,840.00
...ric Equipment	10%	-	-	69,872.00	69,872.00	3,494.00	66,378.00
...ighting Equipment	10%	-	-	40,267.00	40,267.00	2,013.00	38,254.00
...ture & Fixtures	10%	-	20,000.00	1,790,014.00	1,810,014.00	181,001.00	1,629,013.00
...quipments	15%	-	-	2,603,439.00	2,603,439.00	195,258.00	2,408,181.00
...ry Books	15%	-	-	273,001.00	273,001.00	20,475.00	252,526.00
...e Equipment	10%	-	-	1,068,031.00	1,068,031.00	53,402.00	1,014,629.00
...s	15%	-	-	10,594,296.00	10,594,296.00	794,572.00	9,799,724.00
		-	20,000.00	22,355,834.00	22,375,834.00	3,025,289.00	19,350,545.00

Shoolini University Solan H.P.

Annex-

Sr. No.	Grant Project Income	2010-11	2011-12	2012-13	2013-14	2014-15	Total Income(Rs.)
1	Grant of DST Mushroom Research	–	253691	–	–	–	253691
2	Project SERB Dr. Pardeep Singh	–	–	–	–	1700000	1700000
3	Project DST SERB Dr. Rohit Goyal	–	–	–	1500000	300000	1800000
4	Project DBT Dr. Astha Tripathi	–	–	–	660000	–	660000
5	Project Dr. Abhishek Budhiraja SERB	–	–	–	–	1300000	1300000
6	Project Dr. Kalpna Chauhan	–	–	–	1424275	150350	1574625
7	Project Dr. Preeti Thakur (DST)	–	–	–	1270000	–	1270000
8	Project Dr. Saurabh DBT RGYI	–	–	–	–	1736200	1736200
9	Project DST Project Dr.Somesh Sharma	–	–	–	–	635590	635590
10	Project DBT Dr. Dinesh Kumar Chantanta	–	–	–	525000	356200	881200
11	ProjectDRDO _ Atul Thakur	–	–	500000	490000	–	990000
12	Project (Dr. Sunity Singh)	–	–	–	1100000	–	1100000
13	Project DST(Saurav Kulshetra)	–	–	1200000	500000	400000	2100000
14	Project SERB(Dr. Amit Seth)	–	–	–	850000	500000	1350000
15	Project (Dr.Umar Farooq)	–	1103564	362299	798217	776418	3040498
16	Project DAE_ Dr. Atul Thakur	–	–	992345	390975	348200	1731520
17	Project DST Dr. Adesh K Saini Fasttrack	–	–	900000	400000	500000	1800000
18	Project DBT Dr. Anuradha	–	–	2946900	849918	–	3796818
19	Project DST Dr. Anuradha	–	–	1300000	–	400000	1700000
20	HRD Infrastructure Project Dr. Dinesh Kumar	–	–	–	–	2518000	2518000
21	Indo Newzealand Project Dr. Adesh K Saini	–	–	–	1492000	–	1492000
22	Project Inspire	1900000	–	–	–	–	1900000
23	Project Inspire	1500000	–	–	–	–	1500000

No.	Particulars						Total
24	Project Inspire	—	1400000	530436	—	—	1930436
25	Project Inspire	—	439162	473000	—	—	912162
26	Project Inspire	—	3500000	654755	—	—	4154755
27	Project Inspire	—	1800000	1228754	—	—	3028754
28	Project Inspire	—	3500000	—	—	—	3500000
29	Project Inspire	—	—	1800000	—	—	1800000
30	Project Inspire	—	—	1200000	—	—	1200000
31	Project Inspire	—	—	1200000	—	—	1200000
32	Project Inspire	—	—	—	1700000	—	1700000
33	Project Inspire	—	—	—	500000	—	500000
34	Project Inspire	—	—	—	1700000	—	1700000
35	Project Inspire	—	—	—	2803557	—	2803557
36	Project Inspire	—	—	—	—	1400000	1400000
37	Project Inspire	—	—	—	—	1400000	1400000
38	Project Inspire	—	—	—	—	1100000	1100000
39	Project Inspire	—	—	—	—	1100000	1100000
40	Grant Engineering Workshop Income Dr. Amit Sharma	—	—	—	—	86936	86936
41	Grant Engineering WorkShop Income Dr. Ranchan	—	—	—	—	94000	94000
42	Grant Engineering Workshop Income Pankaj Vaidya	—	—	—	—	40386	40386
43	Grant Engineering Workshop Income Sunil Pathania	—	—	—	—	62446	62446
44	Grant Engineering Workshop Income _ Amit Nayyer	—	—	107894	101436	150000	359330
45	HPMC Project Grant Dr. Dinesh Kumar	—	—	—	45000	—	45000
46	Grant From DBT-CTEP for Conference Biotech	25000	80000	—	—	—	105000
Yearwise Grant Income(Rs.)		3400000	12021417	15476383	19100378	17054726	67052904