Shoolini University of Biotechnology and Management Sciences,
Village Bhajol, P.O. Sultanpur,
Dist. Solan, H.P, Pin 173229
Academic & Administrative Audit (AAA)

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Audit Title	Audit Details
Academic Audit & Administrative Audit 2015-16	Audit information for Academic Year (A.Y. 2015-16)

Detail of the Institution	
Data of the Institution	
1. Name of the Institution	Shoolini University of Biotechnology and Management Sciences
Name of the head of the Institution	Prof. Prem Kumar Khosla
Designation	Vice Chancellor
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	01792308000
Mobile no.	9816064182
Registered Email	iqac@shooliniuniversity.com
Alternate Email	vc@shooliniuniversity.com
Address	Village Bajhol, Post Office Sultanpur
City/Town	Solan
State/UT	Himachal Pradesh
PIN Code	173229
2. Institutional Status	
University	Private
Type of Institution	Co-Education
Location	Rural
Financial Status	Private
Name of the IQAC co-ordinator/ Director	Ms. Varsha Patil
Phone no/Alternate Phone no.	01792-308000
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Registered Email	iqac@shooliniuniversity.com
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3. Website Address	
Web-link of the AQAR: (Previous Academic Year)	https://shooliniuniversity.com/pdf/AQAR 2015-16.pdf
4. Whether Academic Calendar prepared during the year	Yes
5. Accreditation Status/ Year of accreditation/ Grade	Yes; 2016; B++
6. Establishment of IQAC/ date of establishment	Yes; 26-Dec-2014

CRITERION I

CRITERION I: CURRICULAR ASPECTS

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. 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.).

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 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.

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.

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

Employability:

Outcome driven curriculum is designed and developed with the participation of industry experts.

Innovation:

Curriculum innovations adopted are:

- o Joint development of curriculum with industry
- o Development of detailed Lecture Schedules
- o Distribution of the lecture schedules before commencement of classes and availability of the same on eUniv.
- o Online Study Material- Lectures, cases, assignments and audio/videos etc.
- o Live Industry Projects.
- o Guest/Expert Lectures.
- o Guru Series Talks

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. Some students of the University carry out funded research as JRF/SRF and also as research scholar with faculty members doing industrial projects. 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.

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?**

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.

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:

UG	PG	Dual Degree	PhD
19	28	15	7

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.

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.

c. Courses offered in modular form

All courses at University are offered in modular form.

d. Credit accumulation and transfer facility

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.

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.

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:

- o 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 9 inter-disciplinary programs across different faculties in the University.

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).

1.3.2 During the last four years, how many new programs at UG and PG levels were introduced? Give details.
Inter-disciplinary Programs: 9
Programs in emerging areas: 16

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

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. 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.
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.

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. During 2015-16 10 value added courses/ certifications have been provided.

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?

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 like MHRD.

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. 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 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.

CRITERION-II

CRITERION II: TEACHING – LEARNING AND EVALUATION

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.

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.

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. Analysis of admissions is conducted periodically so as to make changes to draw students from all sections of the society. 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:

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 society.

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

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.**

The trend during the previous academic session is as follows:

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.

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.

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.

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?

The University has no formal mechanism to identify differential requirements at the time of admissions. This is supposed to 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?

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.

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?

Yes. (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. 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?

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.

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.

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:
- Interactive sessions in classes/talks/lectures.
- Class presentations and project reports.
- Industrial visits/Field visits/Guest lectures and exchange programs.
- Surprise tests and quizzes with on the spot feedback.
- Exhibitions (science and engineering).

- 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.).
- 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.
- 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.
- 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.

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

eUniv platform of Shoolini University and Learning Management System (LMS) tool is proliferating learning. 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.

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?

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.

2.3.9 What steps has the University taken to orient traditional classrooms into 24x7 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.

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 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 offered in the campus.

- Emphasis has also been laid 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

Different clubs are functional 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?

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%.

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:

- Faculty of Applied Sciences and Biotechnology - 75%.
- Faculty of Basic Sciences - 74%.
- Faculty of Pharmaceutical Sciences -50 %
- Faculty of Engineering and Technology – 20 %
- 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.

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 for optimal use of the LMS platform. Laptops and projectors are made available to teachers for computer-aided teaching/learning. Blogs are developed by some faculty members to 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. 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.

2.4.2 Furnish details of the faculty:

The category wise number of the teachers is given as follows:

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).

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.

Professor of Eminence : 14

Adjunct Faculty: 7

Visiting Professor : 9

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.

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?

3   Faculty members

3.1.1 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 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**

3.1.2 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**

3.1.3   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 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.

3.1.4   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?

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.

3.2   Evaluation Process and Reforms

3.2.1   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.

3.2.2 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..

3.2.3 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.

3.2.4 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.

3.2.5 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.

3.2.6 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.

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

Not Applicable

3.2.8 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.

3.2.9 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.

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?

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 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
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

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

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.**

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.

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.

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:
1. Advancing Funds for Sanctioned Projects
2. Providing Seed Money
3. Simplification of procedures for sanctions/ purchases by investigators.
4. Autonomy to the principal investigator/coordinator for utilizing overhead charges.
5. Timely release of grants.
6. Timely auditing.
7. Submission of utilization certificate to the funding authorities.

3.1.4 **How is interdisciplinary research promoted?**

1) 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.

2) Collaboration with national/ international institutes/ industries:

To encourage collaborative research, Shoolini University has signed MoUs with several national, international institutes and industries

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.

- 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.

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

- o 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.
- o 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.
- o At least one member from industry is appointed in Research & Development committees and Board of Studies of each Faculty.
- o Exchange visits have been organized with academia and industry thus giving impetus to research activities.

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.

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.

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 includes participants from within country and abroad.

3.1.12   **Resource Mobilization for Research**

3.1.13   **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.

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

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.

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

List of ongoing projects

Funding Agency	No.
MoFPI	1
DST	8
DBT	4
BRNS	1
MNRE	1
ICMR	1
DRDO	1
DAE	1
Indo NZ DST project	1

3.1.16 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.

The University has projects sponsored by industry/corporate houses; details tabulated:

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/-

3.1.17 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.

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

List of projects completed: 4 no

b. Inter-institutional collaborative projects and grants received:
i) All India collaboration

Number of collaborative projects: 8
Number of International Projects : 8

3.2   Research Facilities

3.2.1   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:

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

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

The University has a Knowledge Center which caters to the needs of the researchers.

3.2.3   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?

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.

3.2.4   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

3.2.5   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:

- Research Center in Nanotechnology
- 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.

3.2.6 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.

3.3 Research Publications and Awards

3.3.1 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.

3.3.2 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. 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: 9

Books edited : 13

Books with ISBN numbers : 11

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

3.3.3 **Give details of**

Faculty serving on the editorial boards of national and international journals: 12
Faculty serving as members of steering committees of international conferences recognized by reputed organizations / societies: 2

3.3.4 **Provide details of:**

Research awards received by the faculty and students

In Total 32 faculty members received research awards from various agencies.

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

Twelve faculty members have received various national and international recognitions from reputed professional bodies and agencies.

3.3.5 **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.

3.3.6 **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.

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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.

3.3.7 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?

The University encourages interdisciplinary research and has constituted teams to focus on selected research areas.

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)

3.3.8 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.

3.3.9 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.

3.4   Consultancy

3.4.1   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. Despite having been in existence for a relatively short period of 5 years the University has done well in initiating 13 important consultancy projects in significantly diverse fields.

3.4.2   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.

3.4.3   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.

3.4.4   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.

3.4.5   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/-

3.5   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.

3.5.1   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. During this period university has done 14 different activities.

3.5.2   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.

3.5.3   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.

3.5.4 **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?**

- o 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.
- o 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.
- o Home based Projects are encouraged among women of the neighborhood, especially of village Majholi.
- o 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.

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

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.

3.5.6 **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.**

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

3.5.7 **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.

3.5.8 **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.

3.6   Collaboration

3.6.1 **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.

3.6.2 **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 Coperative 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.

International Academic Alliances with universities and institutions: 11
Alliances with Industry: 5
National alliances with Research and Academic Institutes: 2

3.6.3 **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. Reliance funded lab in Computer Science, Anand Automobile lab etc.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

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.
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.

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.

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?

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.

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)

The University has eight hostels, four each for men and women which meets the current requirements. Total strength of students in hostels is 1,161.

Management of Hostels. The management of hostels and its various functional committees is monitored by the DSW and DRS. Further wardens and hostel superintendent were also their to manage the hostels. All the recreational facilities in hostel/s like gymnasium, yoga center, etc. are available in the university. The hostels have Broadband connectivity/ Wi-Fi facility

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

The University offer medical facilities for its students and teaching and non-teaching staff living in the campus.

4.1.8 **What special facilities are available on campus to promote students' interest in sports and cultural events/activities?**
The University provides facilities for various indoor and outdoor games along with Gym facility.

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.

Departmental Libraries. In addition to the central library, each school maintains a library, which is an adjunct the main Library. Advisory Committee.

Yes, the Library Advisory Committee has been constituted.

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 plans are prominently marked, facilitating use by occasional visitors.

4.2.3 Details of Library Holdings

There are sufficient number of print material such as books, back volumes, thesis, ebooks and e journals along with special collection of text, refence books in the library.

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, hence sufficient number of computers, printers, internet bandwidth etc .

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.

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
Total Amount	4.75	8.59	12,222 books 120 print journals

2014-2015

Head	Budget	Spent	Books/Journals Added
Total Amount	7.99	13.83	1198 Books

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.

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

Total Number of Computers/ Laptops: 933,
 o   Computer-student ratio : 1:3
 o   LAN facility : 100 % on LAN

The university has Licensed application software, antivirus for office automation.

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 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.

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

- The Institution facilitates extensive use of ICT resources including development and use of computer-aided teaching/ learning materials for generating a teaching-learning environment.
- 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.
- All computers are connected to a central network with Fiber Optic backbone and are accessible from everywhere within the campus.
- The IT lab allows students, faculty to take printouts, browsing and surfing etc.
- The Wi-Fi enabled campus provides 24x7 internet access to students and Faculty.
- All lecture halls are equipped with specialized teaching aids like LCD projectors to enhance the quality of the teaching learning experience.
- All auditoriums are inter connected for live broadcasting of lectures and motivational movies, this facility has been extended to hostels.
- 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.
- Training programs are regularly conducted on software applications, installation of software, upgrading hardware etc.
- Faculty are allowed to download and rehearse lecture presentation.
- Teachers use ICTs for 'routine tasks' (record keeping, lesson plans, information presentation, searches on the Internet etc.).
- Special sound proof e-Studios have been made for faculty to prepare and record interactive lectures.
- Labs are modernized and upgraded to keep pace with the latest technologies. Help of industries has also been taken in this regard.
- 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.
- 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.

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.

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 Details of 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?

- The University has established smart classrooms and auditoriums equipped with in-built video conferencing on real time basis to allow students- faculty access, even from a remote location.
- The University has a eUniv platform through which faculty upload interactive lectures for respective courses.

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.

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 along with his team.

CRITERION V

CRITERION V: STUDENT SUPPORT AND PROGRESSION

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?

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. Which introduces students with various academic rules, faculty members, facilities, library rules and regulations of the University ERP etc.

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
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

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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?

The University provides assistance by providing pamphlets, along with prospectus enumerating the procedure for obtaining loans.

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.

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 aids provided to students.

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?

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.

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 Hostel facility of International standards, A special course for speaking and writing English. Cultural activities, mentor student is made available to help for local hospitality. Conducted tours and Airport pick-ups.

Physically challenged / differently-abled students:

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.

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:

The students are encouraged to participate in various competitions, conferences and seminars, both in India and abroad.

Health Center, Health Insurance etc.

The University has a well-equipped health center for providing medical aid and clinical facilities. The center is manned by two experienced full time doctors (including a lady doctor), one pharmacist, one lab technician and one staff nurse. 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, training in Personal and Interpersonal communication skills imparted as part of the SPRINT program. 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.

Performance enhancement for slow learners:

> Faculty members and mentors help slow learners through tutorials.

> Special attention in skill enhancement and personality grooming to build their confidence level is provided during SPRINT program.

Exposure of students to other institutions of higher learning/ corporates/business houses, etc.:

Students of 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.

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. **Curriculum** is is designed to meet requirements of NET/SET/GATE/GPAT and other competitive examinations. **Coaching classes and Value added Courses**: have been incorporated in the curriculum of some programs like MBA, B. Com (Hons), BBA and B. Tech. Course material is thereafter put on the University net for wider circulation.

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 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. Taking advantage of being located in the Himalayas, mountaineering and trekking camps are conducted as a part of outdoor adventure training.

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.

5.1.16 Does the University have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?

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 by conducting gender related lectures by counsellors on sexual harassment and its prevention, Creation of a cell to deal with issues related to sexual harassment, 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.

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.

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.

The University ensures adequate funds are made available to support women's students' activities. International women's day is celebrated. Women are encouraged to participate in sports. Separate fitness center is established for women students. Large number of women students' participate in the University Athletic meet. 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 UG to PG student progression along with others is given below:

- **School of Electrical and Computer Science Engineering:** 15.00%
- **School of Mechanical and Civil Engineering:** 10.00%
- **School of Pharmaceutical Sciences:** 10.00 % and PG to Ph.D Student Progression 5.00%
- **School of Business Management Sciences and Liberal Arts:** 38%
- **School of Physics and Material Sciences:** PG to Ph.D Student Progression 9.00%
- **School of Chemistry:** PG to M.Phil Student Progression 24.59% and PG to Ph.D Student Progression 48.27%
- **School of Biological and Environmental Sciences:** PG to M.Phil Student Progression 25% PG to Ph.D Student Progression 10.00%
- **School of Biotechnology,** PG to M.Phil Student Progression 5.00% and PG to Ph.D Student Progression 5.00%
- **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

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.?

The total number of students who qualified   in competitive examinations are 64.

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.

The students have participated in various activities such as sports, cultural and extracurricular activities during the years 2012-2015.

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.

The students of the university are recipients of various prizes during the period of 2012-2015 in various sports and extra cocurricular activities.

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 to promote heritage consciousness using regular classes of Yoga and Meditation for undergraduate students. Excursion trips of students to heritage places, Oraganised a seven day workshop on the 'Bhagwad Gita etc'

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.'

5.3.5   Does the University have a Student Council or any other similar body? Give details on its constitution, activities and funding.

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. Class Representatives meet their Deans to discuss issues related to Academics, Infrastructure, grievances, examinations etc. At the University level there is a Dean Student Welfare who looks after problems of students in conjunction with the management. Dean Resident Student attends to all problems in Hostels. 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

Alumni Association

Internal Quality Assurance Cell (IQAC.

Hostels Committee

Discipline Committee

Library Advisory Committee

Sports Committee.

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.

CRITERION VI

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

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'.

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.?

Yes, 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

6.1.3   How is the leadership involved in ensuring the organization's management system development, implementation and continuous improvement?

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.

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.

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.

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.

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?

The University ensures that all positions in various statutory bodies are filled in time

6.1.6   Does the University promote a culture of participative management? If yes, indicate the levels of participative management.

The University promote a culture of participative management. 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.

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.

A system of 'mentorship' has been established and helps groom leaders to take on additional responsibilities. 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. 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.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.

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.

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.

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 various programmes.

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: Highly specialized research equipment and instrumentation. Use of Statistical Package for Analytical Analysis. Extensive use of ICT, optimizing 'in-house' developed software. Use of Video-Conferencing for remote lectures/ talks. eUniv and virtual resource center. Language Lab. 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.

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.

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.

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.

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 providing latest technical know-how and propagate best practices for the pharmaceutical and agro-based industry. 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. Encourage watershed management system. Encourage local building techniques and material.

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: 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. Enhance institutional support for promotion of qualification and international exposure. Increase the quantum and extend geographical outreach of the faculty exchange program. Increase the number of MoU's with international universities focusing on the United States, European Union and East Asia. Increase cooperation and provide faculty to neighboring East Asian countries.

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.

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.

6.2.2 Describe the University's internal organizational structure and decision making processes and their effectiveness.

The university has well defined organizational structure. 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.

6.2.3 Does the University have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?

The University have a formal policy to ensure quality. 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.

6.2.4 Does the University encourage its academic departments to function independently and autonomously and how does it ensure accountability?

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.

6.2.7 student feedback on institutional performance? If yes, what was the institutional response?

Students' feedback is collected through a well-structured questionnaire for improvement of the University's performance.

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?

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. The accounts are periodically audited by Chartered Accountants and submitted to Himachal Pradesh Government and other regulatory bodies.

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 Orientation programs for faculty, FDPs, Industry Interaction, Training Programs, workshops conferences and seminars etc.

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.
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 such as Health insurance. Provision of medical leave and on campus medical facilities. Exclusive facility for women in women center, including a crèche. Subsidized transportation. Employees Provident Fund. Fee concession to wards. Incentives for higher qualifications/ generating research grants. 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:
- ▪   Compensation at par with Top Universities.
- ▪   Rewards.
- ▪   Annual Appraisal.
- ▪   Promoting Professional Development.
- ▪   Research Support.
- ▪   Spousal employment.
- ▪   Safe Environment
- ▪   Creche.
- ▪   Faculty Club.

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.

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. 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.

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.**

NA

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. 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.

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, various initiatives have been taken by the University to improve teaching, learning and evaluation.

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?

There is a centralized body headed by the Dean Academic Affairs to review the teaching learning process. In the next step of quality assurance, IQAC was constituted in the year 2015.

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 given.

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 there are external experts as 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.?

The periodic review of the administrative, academic and other activities is done periodically.

CRITERIA VII
CRITERIA VII: INNOVATIONS AND BEST PRACTICES

Shoolini University spires to be amongst the Top 200 Global Universities by 2022. 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

Sustainability of the Himalayan eco-system is a thrust area for Shoolini University, and its focus is directed on environment. The University has 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. The University is having a 'neat and litter free' campus, and is 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 Green audit of the campus.

7.1.2 What are the initiatives taken by the University to make the campus eco-friendly?

Energy conservation:

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:

- 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:

- o Waste water from girl's hostel (located uphill) used for gravity induced drip irrigation for library lawns.
- o Water reservoirs to recharge underground water planned.
- o 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:

The check dams and retaining walls have been added to reduce soil erosion, channelize the water flow as also to recharge underground water.

Efforts for Carbon neutrality:

ISO certification has shown that the campus meets laid down norms.

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.

Hazardous waste management: Please refer to points given above.

e-waste management: Disposal is

outsourced. **Any other**

There is a progressive plan to create an arboretum around the campus, making the campus a regional green lung. In addition, 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. 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
- o Digitization of the library resources and interlinking of school libraries and Study Center
- o Installation of Freely Available Software for Analytics Lab
- o Linking of Auditoriums
- o Guru Series of Talks as part of the Yogananda Knowledge

Initiative

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 lending Experience with Talent**

   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.

Best Practice - 2

1. **Title: Developing Inclusive Competencies through SPRINT**

   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.

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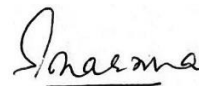**<u>Overall recommendations by the committee</u>**

1. The university is having mandate to be among top global Universities by 2022. This vision is shared by the Trustees, Management and more importantly, by faculty and staff who are the life and blood of this institution, remains a major support. More efforts are needed from all stakeholders to fulfil the requirements of this mission and distinguish itself from other institutes.

2. Shoolini's focus on research and development across the various Schools and its success to date is its second biggest strength. At present virtual laboratories are used in Engineering and Technology courses and and it needs to be extended across the campus as use of LCD and smart classroom facility enhances the teaching and learning experience. The research area needs to be further strengthened with more international research collaborations to meet the aspirations of the University.

3. 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. The university teachers and scholars needs to get more national and international fundings through collaborations to take this journey further and maintain the pace of research to meet the global standard.

4. To meet its objectives the University needs to work hard for overall growth of the university. The University needs improvement in formal mechanism to identify differential requirements at the time of admissions.

(Dinesh Kumar)
Dean, PG Studies

(Rohit Goyal)
Controller of Examination

(Somesh Sharma)
Associate Professor

(Sunil Puri)
Registrar and Dean Academics
Shoolini University of Biotechnology and Management Sciences, Bajhol, Solan