



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

**INDEX**

Audit Title	Audit Details
Academic Audit & Administrative Audit 2017-18 & 2018-19	Audit information for Academic Year (A.Y. 2017-18 & 2018-19)

Sr. No.	Contents	Page No.
<b>PART A</b>		
1	Data of the Institution	02-05
<b>PART B</b>		
2	Criterion I- Curricular Aspects	06-09
3	Criterion II- Teaching –Learning and Evaluation	10-14
4	Criterion III- Research, Innovations and Extension	15-25
5	Criterion IV- Infrastructure and Learning Resources	26-29
6	Criterion V- Student Support and Progression	30-34
7	Criterion VI- Governance, Leadership, and Management	35-41
8	Criterion VII- Institution Values and Best Practices	42-56
	Recommendations of committee	57-57

<b>Detail of the institution</b>	
<b>Data of the Institution</b>	
<b>1. Name of the Institution</b>	Shoolini University of Biotechnology and Management Sciences
<b>Name of the head of the Institution</b>	Prof. Prem Kumar Khosla
<b>Designation</b>	Vice Chancellor
<b>Does the Institution function from own campus</b>	Yes
<b>Phone no/Alternate Phone no.</b>	01792308000
<b>Mobile no.</b>	9816064182
<b>Registered Email</b>	iqac@shooliniuniversity.com
<b>Alternate Email</b>	vc@shooliniuniversity.com
<b>Address</b>	Village Bajhol, Post Office Sultanpur
<b>City/Town</b>	Solan
<b>State/UT</b>	Himachal Pradesh
<b>PIN Code</b>	173229
<b>2. Institutional Status</b>	
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
Mobile no.	9857550999
Registered Email	iqac@shooliniuniversity.com
Alternate Email	varshapatil@shooliniuniversity.com
<b>3. Website Address</b>	

Web-link of the AQAR: (Previous Academic Year)	<a href="https://shooliniuniversity.com/pdf/AQAR2017-18.pdf">https://shooliniuniversity.com/pdf/AQAR2017-18.pdf</a>
<b>4. Whether Academic Calendar prepared during the year</b>	Yes
if yes, whether it is uploaded in the institutional website: Weblink:	<a href="https://shooliniuniversity.com/pdf/ACADEMIC%20CALENDAR%202018-19.PDF">https://shooliniuniversity.com/pdf/ACADEMIC%20CALENDAR%202018-19.PDF</a>
<b>5. Accreditation Status/ Year of accreditation/ Grade</b>	Yes; 2016; B++
<b>6. Establishment of IQAC/ date of establishment</b>	Yes; 26-Dec-2014

### 7. Internal Quality Assurance System

<b>Quality initiatives by IQAC</b>
Parivartan - Support classes for kids of staff Radio Shoolini New programs for the Academic Year 2018-19 Research Awards National Board of Accreditation for B.Pharm & MBA Program myTree-Save the Himalayas Employee Awards Noble laureate Subrahmanyam Chandrasekhar Gallery Dr. CV Raman Gallery

### 8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

S. No	Funding Agency	Year of Award	Amount
1	DST	2014	₹ 1,596,238
2	HIMCOSTE	2018	₹ 300,000
3	HIMCOSTE	2019	₹ 325,000
4	NMHS	2016	₹ 1,010,294
5	NMHS	2019	₹ 1,199,616
6	NMHS	2019	₹ 2,114,000
7	DST	2018	₹ 1,123,000
8	DBT	2015	₹ 450,000
9	SERB-TARE	2019	₹ 275,000

10	HIMCOSTE	2018	₹ 285,000
11	MICROALGAE DEVELOPMENT ENERGY INDIA PVT. LTD.	2018	₹ 288,000
12	DRDO	2015	₹ 39,054
13	AYUSH	2018	₹ 2,000,000
14	Quasar, Qatar	2018	₹ 2,500,000

**9. Whether composition of IQAC as per latest NAAC guidelines: Yes**

**Date of last IQAC meeting held: 03.07.2018 (10<sup>th</sup> meeting of IQAC**

**Proceeding for last IQAC meeting minutes: Verified**

**10. Whether IQAC received funding from any of the funding agency to support its activities during the year? No**

**11. Significant contributions made by IQAC during assessment period**

Sr. No.	Activity	Detail
1	Academic Planning and Strategy	Course Modifications, Emphasis on Syllabi integrated between Theory, Practical learnings delivered through Periodic Industrial Visits Familiarization Trips.
2	Resource Planning	Human Resources (Teaching Non-Teaching Staff Planning including Visiting Faculty)
3	Research Innovation Planning	Faculty Annual Target, Research Projects, Collaborations, Patent targets, Research Guidance, Seminar, Workshops, Conferences & Club Committee Activities
4	Industry Interaction and Placement Planning	Planning of Events, Corporate Meetings, Internship Planning, Pre- Placement Talks, Placement Grooming Activities, and Placement Calendar
5	Internationalization Planning	Tie-ups, Collaborations, Faculty/Student Exchange Programmes, Study, Abroad Programme/Scholarship for students

**12. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year**

Plan of Action/ Achievements/outcomes
my Tree – Save the Himalayas Geotagging; Employee Golden Rudraksha Award; Radio Shoolini; Dr. CV Raman Gallery; Chandrasekhar Gallery; Feedback-Employer, Alumni & Parents; MOOCs courses to be introduced; New programs: B.Sc. (H) Agriculture and M.Sc. Yoga & Research Awards

**13. Whether AQAR is approved from statutory body, if yes, provide date of proceeding?**

**Yes; 19 July 2019 (Academic Council)**

**14. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning**

No

Yes

**15. Whether institutional data submitted to AISHE:**

Year of Submission

2019

Date of Submission

25-02-2019

**17. Does the Institution have Management Information System?**

Yes

MyShoolini and eUniv management information systems

## Part B

### CRITERION I – CURRICULAR ASPECTS

#### 1.1 Curriculum Design and Development

##### 1.1.1 –

##### Details about Academic Programmes in 2017-18

Level of the Programme	Number of Existing Programmes	Number of Programmes added during the year
<b>Total</b>	<b>65</b>	<b>13</b>

Pattern of programmes:

Pattern	Number of programmes
Semester	64
Trimester	Nil
Annual	Nil
Quadmester	01 (MBA)

##### Programmes for which syllabus revision was carried out during the Academic Year 2018-19.

Year	Programs	Detail/ Specialization
2018-19	UG/PG/PhD programs	Food Technology, Biotechnology, Food Technology, Food Technology, Food Technology, Biology and Diversity of Algae and Fungi, Taxonomy of Angiosperms, Cell & Plant Molecular Biology, Instrumentation Method & Analysis, Environmental Biology, Cell Biology & immunology, Limnology, Biotechnology, Microbiology, AI & Business Applications-I, AI & Business Applications-II, Microeconomics Theory-I, Basics of law, Microeconomics theory-II, Corporate Accounting, Human Resource Management, Auditing, Computerized Accounting System, Income Tax Law Practices, Banking and Finance (AMFI), Goods and Services Tax, Stock Market and Investing, Microeconomics Theory-I, Basics of law, Microeconomics theory-II, Human Resource Management, Sales & Distribution Management, Income Tax Law Practices, Microeconomics Theory-I, Basics of law, Microeconomics theory-II, Corporate Accounting, Financial Accounting, Human Resource Management, Income Tax Law Practices, Stereochemistry to Hydrocarbon, Reaction mechanism and Stereochemistry, Computer

		Science and Engineering, Artificial Intelligence, Cloud Computing, Cyber Security; Computer Science and Engineering, B. Tech with IOT, Mechanical-Specialization in Automobile, Mechanical Classical Mechanics, Addition of Lab course in M. Sc 1
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As per annual report year 2017-18, almost 90% of faculty members involved in curriculum Restructuring/revision/syllabus development as a member of the Board of study/Faculty/Curriculum Development workshop.

**1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year 2018-19**

Year	No. of programs
2018-19	102 courses in 2018-19 across different disciplines at UG, PG and PhD level

**1.2 – Academic Flexibility**

**1.2.1 – New programmes/courses introduced during the Academic year**

Year	No. of programs	Program detail
2017-18	03	B.Sc Hospitality & Hotel Administration; B.Sc Yoga; BALLB & LLB;
2018-19	02	BSc (Agriculture); MSc (Yoga)

Flexibility of the Curriculum: **Choice Based Credit System with Open electives was introduced.**

**1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the University level during the Academic year**

Year	No. of programs	Detail/ Specialization
2018-19	50	Introduction to World Cuisines - Open Elective; Network Marketing - Open Elective; Becoming an RJ - Open Elective; The Japanese way to cleanliness – open Elective; Gender Study; Introduction to World Cuisines - Open Elective; Network Marketing - Open Elective; Becoming an RJ - Open Elective; The Japanese way to cleanliness - Open Elective; The Japanese way to cleanliness - Open Elective; Gender Study; CSE - Artificial Intelligence; CSE - Cloud Computing; CSE - Cyber Security; EE – IoT

		Robotics and Automation; Business Analytics; Computer Programming Developing Patents; Python; Industrial Waste Management; Management of Investment (AMFI); Food Processing Technology; Himalayan Biodiversity Spirituality and Meditation; Functional Foods; Yoga for Daily Life Network Marketing; IPR Biosafety and Bio Ethics; Digital and Social Media; Food Packaging Technology; Business Organization and Management
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### 1.3 – Curriculum Enrichment

#### 1.3.1 – Value-added courses imparting transferable and life skills offered during the year 2018-19

<b>Value Added Courses</b>
Biostatistics
Functional Foods: Concept, Technology, and Health Benefits (AGMOOCKS Online Course)
Introduction to internet of things (IoT) (MOOC Course) (CSU 191)
Electric Cars: Introduction (MOOC Course) (CSU192)
Edu Course - Water Management (CSU193)
Instrumentation Methods and Analysis
Remote sensing and Geographical Information
Creativity in Business
HR Workshop
Positive Psychology
AI Workshop
Workshop in Aptitude
Workshop in career Planning
Workshop on how to crack-GD and Interview
Workshop on preparing a Business Plan
Artificial Intelligence (MOOC)
Research project for B. Sc and M. Sc students
Wildlife Ecology
Project for B-Pharmacy
AWS (MOOC)
Basics of Artificial Intelligence (MOOC)
Application based Programming in Python (MOOC)
Nutrition and Health-Food Risks (EDX/MOOC)
Food Microbiology and Food Safety (Swayam/MOOC)
Urban Sewage Treatment (CSU268)
Edu Course - Managing building Adaptation: A Sustainable approach (CSU276)



Quantum Mechanics
SPRINT-For all students
Social Project-UG & PG

### 1.3.2 – Field Projects / Internships undertaken during the year 2018-19

<b>Program type</b>	<b>Programme Specialization</b>
B. Tech	Food Technology, Biotechnology, CSE, Mechanical, Civil Engineering
B.Sc.	Food Technology, Zoology, Biotechnology, Microbiology; Hospitality & Hotel Administration
MSc	Biotechnology, Microbiology
MBA	HR, Finance, Marketing,
BBA	Business Administration
BCom (Hons)	Commerce
BA (Hons)	English, Economics; Journalism & Mass Communication
Projects	Pharmacy
B. Pharma	Pharmacy
PhD	Physics
MSc	Physics

## 1.4 – Feedback System

1.4.1 & 1.4.2 – Whether structured feedback received from all the stakeholders Yes

<b>Year</b>	<b>Detail</b>
<b>2017-18</b>	Employee, Students, Alumini, Staff, Stake Holder using LMS eUniv platform
<b>2018-19</b>	Employee, Students, Alumini, Staff, Stake Holder using LMS eUniv platform including ‘Manthan’ program

## CRITERION II

### TEACHING- LEARNING AND EVALUATION

#### 2.1 – Student Enrolment and Profile

##### 2.1.1 – Program Demand Ratio during respective assessment year 2018-19

Year	UG programs (%)	PG programs (%)	PhD programs (%)
2018-19	1:8	1:7	1:8

#### 2.2 – Catering to Student Diversity

##### 2.2.1 – Student - Full time teacher ratio

Year	Number of students enrolled in the institution (UG)	students enrolled in the institution (UG)Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018-19	1989	992	108	119	119

#### 2.3 – Teaching - Learning Process

##### 2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), eLearning resources etc.

Year	Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)
2018-19	227	227

##### 2.3.2 – Students mentoring system: Yes

Year	Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
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2018-19	3131	227	1:13.8
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## 2.4 – Teacher Profile and Quality

### 2.4.1 – Number of full-time teachers appointed during the year 2018-19

Year	No. of sanctioned positions	No. of filled positions	No. of faculty with Ph. D
2018-19	48	48	23

Total No. of permanent faculty for Academic Year 2017-18

Total	Assistant Professors	Associate Professors	Professors	Others	No. of permanent faculty with PhD
212	137	23	45	7	106

### 2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies)

Year	No. of full-time teachers receiving awards from state level, national level, international level	Detail of award/s
2018-19	21	Teaching Innovation Award, ZIIAT, New Delhi, India S.S Bir Gold Medal in Pteridology; Group headed by Prof. Kulshreshtha won India Innovation Growth Program 2.0, University Challenge 2019; Sajag Jal Prahare Samman 2019 by Nav Prabhat Jan Sewa Sansthan New Delhi; Awarded 2 <sup>nd</sup> Best Scientific Poster Prize during 2 <sup>nd</sup> International Conference- RAAEASGD-2019; Green Thinker – Bright Educators Award; SOT Undergraduate Faculty Development Educational grant (Society of Toxicology); Tylor and Francis travel scholarship to attend 6 <sup>th</sup> world conference of research integrity (WCRI) held at University of Hong Kong, Hong Kong; Scholarship of 1500 USD award from National Cancer Institute of Health for workshop at Jackson Laboratory, USA.

		SCERT, Solan (HP); International Capacity Development t Program of Beijing Normal University (Best Coordinator for Capacity Development t in Himalayan Region); Next Generation Pteridology - The Indian Perspective; Member of International Scientific Committee of international Conference on Education Reform, Management Innovation and Social Science (ERMIS 2019) held at Beijing, China on March 24 and 25, 2019.
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### Faculty participation in conferences and symposia in 2017-18:

No. of Faculty	International level	National level	State level
Attended Seminars	15	83	15
Presented Papers	17	12	0
Resource Persons	2	30	1

Total No. of actual teaching days during this academic year 2017-18: 191 days

### 2.5 – Evaluation Process and Reforms

In examination department, in year 2017-18, a strong room having standalone computers were provided to the Controller of Examinations (COE), in which no memory devices are permitted. Three papers are set, out of which, one was selected by the COE. Printouts of the selected question paper are then printed in the same room. COE has a centralized ‘Control Room’ to keep sealed question papers, answer books and exam related the material to maintain confidentiality. Examination halls are prepared in advance and seating plans are prominently displayed. 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. Following are the major initiatives taken during the academic year 2017-18 Online Moodle enabled tests comprising MCQ, short answer and descriptive answer type questions; ‘Safe browser’ mode so that no unfair means; online assignments, quizzes and viva voce introduced in few courses; answer sheets are shown to students for any redressal if at all; Hybrid pedagogy of online teaching through LMS blended with contact classes is in place for all courses across the university; more and more application based question papers are encouraged; Encryption and decryption of roll no done to avoid student identity.

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during assessment year

<b>Programme Name</b>	Number of days from the date of semester-end/ year- end examination till the declaration of results during assessment year 2018-19
<b>UG programs</b>	9-13 days

<b>PG programs</b>	9-15 days
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### Course/Programme wise distribution of pass percentage:

As per annual report 2017-18, the pass percentage of students across all the courses lies with average 86.01%.

2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

<b>Year</b>	<b>Number of complaints or grievances about evaluation</b>	<b>Total number of students appeared in the examination</b>	<b>Percentage</b>
2018-19	4	1000	0.004

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution. Yes (available)

<https://shooliniuniversity.com/pdf/PO%20&%20COs%20combined.pdf>

### IQAC monitoring to evaluate the Teaching & Learning processes:

The Institutional IQAC members along with Deans and HOS monitor the following activities of Teaching-Learning processes:

- i. Students class attendance on Monthly & Semester basis.
- ii. Time-Tabling activities to be planned and uploaded to the intranet for the information of students & all stakeholders.
- iii. Results of the students, programme wise, course wise.
- iv. Results shared with parents
- v. Students Feedback twice a semester.

In academic year 2017-18.

The program works under the aegis of IMPACT (Integrated Management Program for Professional Advancement and Career Transformation) and is dedicated to analyzing the training needs, design and develop the content, deliver and evaluate the program were undertaken. This Program included training related to teaching pedagogy and research.

<b><i>Faculty / Staff Development Programmes</i></b>	<b><i>Number of faculties benefitted</i></b>
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Refresher courses	92
UGC – Faculty Improvement Programme	---
HRD programmes	---
Orientation programmes	41
Faculty exchange programme	13
Staff training conducted by the university	123
Staff training conducted by other institutions	55

## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance: A questionnaire available and detail provided in following link.

<https://shooliniuniversity.com/pdf/Feedback%20Survey%202018-19.pdf>

### CRITERION III

#### RESEARCH, INNOVATIONS AND EXTENSION

##### 3.1 – Promotion of Research and Facilities

##### 3.1.1 – Teachers awarded National/International fellowship for advanced studies/ research

Total no. of faculty	Name of the award	Awarding agency
<b>2017-18</b>		
22	PhD; Post Doc	Young Scientist (6th Academic Brilliance Awards – 18, held at Noida); Best Poster award in Himscience Congress on Science, NIT Hamirpur, HP; Best poster prize in 2 <sup>nd</sup> Himachal Pradesh Science Congress organized by Himachal Pradesh Council for Science, Technology and Environment (HIMCOSTE); Best Poster award in Hargobind Khurana Memorial Symposium, Chandigarh; National Symposium on Botanical Survey of India and Indian Fern Society at Itanagar, Arunachal Pradesh; National Seminar on Technological Interventions in Food Processing and Preservation, Amity University Rajasthan, Jaipur, 17 <sup>th</sup> November 2017; National Seminar on, Amity University Rajasthan, Jaipur, 17 <sup>th</sup> November 2017; 11th International Symposium Melbourne, Australia; Patent Filing; Demonstrator (VLCD); Patent Filing; Max. Publications; “I2OR – Bright Educator Award” by International Institute of Organized Research in 2017; Govt. of India at Manesar, National Capital Region; First Prize in NITTTR, Chandigarh; Best poster prize in 2 <sup>nd</sup> Himachal Pradesh Science Congress organized by Himachal Pradesh Council for Science, Technology and Environment (HIMCOSTE); Best Poster award in Hargobind Khurana Memorial Symposium, Chandigarh
<b>2018-19</b>		
06	PhD; Post Doc	IIT, Ropar; Panjab University, Chandigarh; Shenzhen University, China; Shenzhen University, China; Kauno Technologists Universities; National Institute of Technology South Korea

##### 3.1.2 – Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other fellows in the Institution enrolled

<b>Year</b>	<b>Name of Research fellowship</b>	<b>Funding Agency</b>	<b>Nos.</b>
2017-18	JRF; Research Associate; Research Project Fellow; SRF; SRF-DST INSPIRE	DST, DRDO, HIMCOSTE, NMHS	39
2018-19	JRF; Research Associate; Research Project Fellow; SRF; SRF-DST INSPIRE	Indian Council of Medical Research; HIMCOSTE, Shimla; SERB-DST; NMHS; DST	10

### 3.2 – Resource Mobilization for Research

3.2.1 – Research funds sanctioned and received from various agencies, industry, and other organisations

<b>Year</b>	<b>Funding Agency Details</b>	<b>Total Amount Sanctioned</b>	<b>Total Amount Received</b>
2017-18	DST SERB, NMHS, DRDO, DST, SCTE, MNRE, MoFPI, ICMR, DST FIST	Not declared	0.614 Cr
2018-19	DST SERB, HP R&D, NMHS, Himalayan fellowship, TIASN, DRDO, QATAR	3.73 Cr.	1.16 Cr.

### 3.3 – Innovation Ecosystem

3.3.1 – Workshops/ Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

<b>Year</b>	<b>Total no. of Workshop/ Seminar</b>	<b>Details</b>
2018-19	63	Organized by Cyberoam Lab, Faculty of Engineering and Technology (CSE); Zastra Innovations, Bengaluru, and Shoolini University; Shoolini University Intellectual Property Rights Cell; Dean Student Welfare (SPRINT Team); Faculty of Basic Sciences; Faculty of Applied Sciences and Biotechnology; Faculty of Engineering and Technology; Faculty of Pharmaceutical Sciences; Steve Jobs Incubation Cell

3.3.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year



<b>Title of the innovation</b>	<b>No. of Awardee</b>	<b>Awarding Agency</b>
<b>2018-19</b>		
Start-up Himachal Pradesh Yatra	08	Ministry of Commerce and Industry (at IIT Mandi) The Indian Fern Society Him Science Congress Association IIT Mandi Chandigarh Group of Colleges, Landran, Chandigarh Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE) Beijing Normal University Asia Pacific Economic Cooperation

### 3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year 2018-19

<b>Name of Innovation cell</b>	<b>Name of the Start-up</b>	<b>Nature of Start-up</b>
Steve Jobs Incubation Cell	AADDOO Softech Private Limited	IT
Steve Jobs Incubation Cell	Shoolini Life sciences Private Limited	Life Sciences

## 3.4 – Research Publications and Awards

### 3.4.1 – Ph. Ds awarded during the year

<b>Year</b>	<b>Total number of PhD's Awarded</b>
2017-18	57
2018-19	46

### 3.4.2 – Research Publications in the Journals notified on UGC website during the year

<b>Year</b>	<b>Total number of Research Publications</b>
2017-18	155
2018-19	235

3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

<b>Year</b>	<b>Total number of Books/ chapters published</b>
2017-18	33
2018-19	103

3.4.4 – Patents published/awarded/applied

<b>Year</b>	<b>Total number of Patents</b>
2017-18	83
2018-19	305

3.4.5 – Publications based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

<b>Year</b>	<b>Total number of Publications in Scopus/ Web of Science or PubMed/ Indian Citation Index</b>
2017-18	155
2018-19	289

3.4.6 – h-Index of the Institutional Publications (based on Scopus/ Web of science) in year 2018-19:

H-Index of Shoolini University as on 13.3.2020 is 57

3.4.7 – No. of Faculty participation in Seminars/Conferences and Symposia

<b>Year</b>	<b>Number of Faculty</b>	<b>No. of faculty</b>
2017-18	Attended/Seminar /Workshops/ Presented papers/ Resource persons	139
2018-19	Attended/Seminar /Workshops/ Presented papers/ Resource persons	223

**3.5 – Consultancy**

3.5.1 – Revenue generated from Consultancy projects

Year	Total no. of projects	Client name/s	Amount received (in Rupees)
2017-18	-	-	82,84,283
2018-19	16	SILB, Solan; Thru Maker Film; GOI DST; Integrated Mountain Initiative (IMI); R.S. Film and Production; Sunny Heaven Star; Real Film Production; Anand Autocare; Ministry of New and Renewable Energy; High Performance Thin Layer; romatography (HPTLC); International Scientific and Surgical; National Bank for Agriculture and Rural Development (NABARD); Quasar, Qatar; Anand Autocar; MICROALGAE DEVELOPMENT ENERGY INDIA PVT. LTD. (PVT	<b>11503521</b>

### 3.5.2 – Revenue generated from Corporate Training by the institution

Year	Total no. of training programs	Agency name/s	No. of trainees
2018-19	03	CII; Vibrant Networking Forum; Green Hills Engineering College	<b>574</b>

### 3.6 – Extension Activities

3.6.1 – Number of extension and outreach programmes conducted in collaboration with industry, community, and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc.

Year	No. of Activities	Title of Activities
2017-18	55	University level; NCC; NSS & others: Blood donation camps Tree plantation AIDS Awareness Program Sexual Harassment Prevention Programs. Cleaning of local springs in the neighborhood Campus on use of Solar Energy for cooking Painting competitions on an environmental issue

		<p>Distribution of fruit and forest saplings to farmers for helping them to raise their earning and conservation of the environment</p> <p>Practical Training to local village women in food processing</p> <p>Organization of Spring Flower Festival</p> <p>Village adoption for social upliftment</p> <p>Upgradation of a primary school in the neighborhood</p> <p>A celebration of International Days-World Environment Day, World Forestry Day, World Population Day, World Women Day, World AIDS Day</p> <p>Organize INSPIRE activities of Schools in the University campus</p>
2018-19	28	<p>International Yoga Day; Drug Awareness Drive; Swachh Bharat Abhiyan; Say No to Plastic Programme; Tree Plantation; Muscular Dystrophy; Blood Donation Camp; Cleanliness Drive; ‘Shoolini walk for life’ on world cancer day; Fund raising during World Cancer week; Slogans &amp; poster making on Women’s Day; Cancer Detection Camp (Breast Cancer); Guest talk on gender equality; “Goonj cloth bags distribution” in villages; Village sanitation survey data collection; A visit to Primary School Bhajol; Free classes for underprivileged School students; A visit to Shilli orphanage Quiz and games on World Women’s’ Day; World Social workday; Visit to Cancer Ward, IGMC Shimla; “Sustainability Sambaed” with “Earth Just”; Shoolini campus visit of Dagshai orphanage students; Stationary collection during “The week of Giving”; Cloths collection during “The week of Giving”; Walk on World AIDS Day; A theatre play series on “Say No to drugs”</p>

3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of extension activity	Awarding Bodies
<b>2018-19</b>	
Cancer Awareness	YouWeCan
Muscular Dystrophy	Indian Association of Muscular Dystrophy
Swachh Bharat	Healing Himalayas
Cloth Donation	Goonj
Drug Abuse	ATTAC
Road Safety	Traffic Police, Solan

3.6.3 – Students participating in extension activities with Government Organisations, Non-Govt. Organisations, and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc

Name of Scheme	Organization Unit / Collaborating Agency	Number of students participated in such activities
<b>2017-18</b>		
YouWeCan; Care and Share; Prayas; Women Empowerment Work; Muscular Dystrophy; Swachh Shoolini; Adoption of neighbourhood school; Design of farmland; Enhance Employment and Socio-economic Upliftment.		
<b>2018-19</b>		
Swachh Bharat; Cleanliness under Swachh Abhiyan	250	
Cancer Awareness; YouWeCan Foundation	200	
Indian Association of Muscular Dystrophy; Indian Association of Muscular Dystrophy	60	
Say No to Drugs; Aim to Terminate Tobacco & Cancer	300	
Senior Citizen Engagement; Care & Share	50	
Say No to Drugs; Himachal Pradesh Administration	200	
Muscular Dystrophy; Shoolini University & Manav Mandir	40	
Prayas; Shoolini University	40	
Blood Donation Camp; Shoolini University	102	
Cleanliness Drive; Shoolini University, Solan City, Kumarhatti etc.	800	
World Cancer Day; The mall road, Solan.	190	
Fund raising during World Cancer week; Shoolini University	144	
Slogans & poster making on Women's Day; Shoolini University	102	
Cancer Detection Camp (Breast Cancer); Health Centre, Shoolini University	32	
Guest talk on gender equality; Shoolini University	185	

“Goonj cloth bags distribution” in villages; Shoolini University	124
Village sanitation survey data collection; Shoolini University	86
A visit to Primary School Bhajol; Shoolini University	48
Free classes for underprivileged School students; Shoolini University	16
A visit to Shilli orphanage; Shilli, Solan	42
Quiz and games on World women’s’ Day; Shoolini University	190
World Social workday; Shoolini University & Nearby areas	320
Visit to Cancer Ward, IGMC Shimla; Shimla	56

### 3.7 – Collaborations

#### 3.7.1 – Number of Collaborative activities for research, faculty exchange, student exchange

Nature of activity	Participant
<b>2018-19</b>	
Research Visit	62
Student Exchange (Inbound and Outbound)	35
Teaching International Faculty	2
Higher Studies - MS Biotech	1
Higher Studies - MS Biotech	3
Higher Studies PhD Physics	2
International MoUs	18
National MoUs	10

#### 3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc.

Year	Name of the partnering institution/ industry /research lab for industrial training
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<p><b>2018-19</b></p>	<p>ITC Dwarka, Delhi - 011 4222 9222; Oberoi Cecil, Shimla - 0177 280 4848  Ramada Chandigarh – 1762666999; Hyatt Regency, Chandigarh - 0172 440 1234  Hotel Mayur, Solan – 1792223670; ITC Grand, Goa - 0832 272 1234; DELBREC  INDUSTRY Pvt. Ltd. Chandigarh; Firoz Ahmed; 6283213445; BASE BATTERIES  SOLAN; Shekhar Mehta; 1792321555; Ambuja Cement solan; Suresh Kumar  Sharma; 9418829193; Himachal Pradesh State Electricity Board Ltd. Dehra; Harish  Sharma; 1970233411; CETPA INFOTECH Pvt. Ltd. Noida; Joel Zaildar  8248862418; Padmini VNA Mechatronics Pvt. Ltd. Gurgaon; Vijay Agrawal;  9818581246; BSNL Solan; Guddu Kumar; 1792224000; BSNL Kullu; Sudarshan  Kumar; 9418051300; Reliance Jio Shimla; Rahul Sharma; 7018985116; NexGen  Industry Pvt.Ltd.; Lokesh; 9871358419; Alkema laboratories Pvt LTD, Baddi;  Vinay Kumar Jaiswal; 9625527706; Biomax Biotechniques Pvt Ltd, Panchkula;  Sunil Pandey; 8707640814; Aishwarya life sciences, Baddi.; Sharu; 9816219236;  Accent pharmaceuticals and diagnostic, Pvt Ltd, Solan; Bhupinder Yadav  9119084641; Providian nutraceuticals (Solan); Mr. Gajender; 9218630432;  Indchemie Health Specialities Pvt.Ltd. Baddi; Rajesh Kumar -9625420946; Vysali  pharmaceuticals Limited (Cochin); Sheela Vela pan 9446401700; Alaina Health  care, Baddi; Ashwini Kaushik; 9805039030; Life Vision Health Care Baddi;  Mukesh Bali; 8054217874; Elfin Drugs Private Limited; Sharan Preet; 9216507748;  Maneesh pharmaceutical limited, Baddi; Gautam Sharma 9817747735; Corona  remedies Pvt. Ltd. Solan Himachal Pradesh; Viral Switala; 8219341376 /01792-  252770; Meridian Medicare Pvt. Ltd. Solan, Himachal Pradesh; Ankur Gupta;  Cosmo ferrite Limited; Mr. Pankaj Agnihotri Production Head; 1792277234;  Milestone Gears Pvt. Ltd. Unit 4, Barotiwala, Himachal Pradesh; Mr. Rajesh, HR  person; 9418113780; Shivalik Bimetal solan; Mr. Umesh Kumar 8447362101; A.D  Hydro Power Ltd.;Mr. Tanuj Kapoor;9816103581; MT Auto craft; Mr. Amit  Bansal; HR &amp; Admin; 9816617555; Ind Sphinx Precision Ltd.; Mr. Lokesh  Mahajan; 9805702653; Narayni Cement Pvt. Ltd.; Mr. Umesh Thakur; President  Works 9855020080; Ambuja Cement Ltd, soil (H.P); Mr. Raj Kumar; Maintenance  Head 9816005782; ACC Ltd Barman (H.P); Mr. Ramesh Site engineer;  7831096508; Indo Farm Mr. Chatter Singh Quality Head Swaraj tractors, Mohali;  Miss. Reenu Negi, assistant supervisor of assembly floor; 8196097555; Mahle  Anand filters system India Pvt limited, khandsa; Mr. Mehul Shukla (Process  Manager) 9872832684; Mahle Anand filters system India Pvt limited, khandsa; Mr.  Mehul Shukla (Process Manager), 9872832684; Mahle Anand filters system India  Pvt limited, khandsa; Mr Deepanshu kalia (Manger central process); 8860595773;  Mahle Anand filters system India Pvt limited, khandsa; Mr Manu Kant  (Maintenance head); 9868316856; Mahle Anand Thermal system Pvt limited (Pune,  Maharashtra); Mr. Sushil Kumar; Manager (Process Quality); 7838007787; Mahle  Anand Filter System Pvt.Ltd.(Parwanoo); Mr. Sanjesh Chauhan, (Process -  Assistant Manager) 980594044; Gabriel India limited, Parwanoo</p>
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<p>Mr. Rajesh Kumar - Assistant Manager (Process); 9882013699; Spicer India private limited, jodalli; Ravichandran, (Production Manager); 7026167474; Spicer India pvt. Limited, Pune</p> <p>Mr. Pradeep Singh (Maintenance) Ass. Manager; 7350012758; Gabriel India Limited (Gurgaon); Mr. Bal winder Kumar- Quality manager; 9810390790; MAHLE ANAND Filter system private limited, Chennai; Mr. Shankar Rajendran; Production department</p> <p>9176624110; Gabriel India limited, Hosur; Mr. VISHAL BONGIRWAR- manager (production); 8220005292; MT Auto craft, Parwanoo; Mr. Sanjay Production 9882025784</p> <p>Accent Pharmaceuticals and Diagnostics, Forest Road, Solan, HP. ADI BioSolutions, ohali</p> <p>Bifolium, Chennai; Biomax biotech, Mohali; Central potato research institute, Modicum</p> <p>Central potato research institute, Shimla; Cipla, baddi and Glenmark; Coca cola bottling plant, chatta; CORONA PVT LTD; CPRI, Shimla; CRI, Kasauli and Sun Pharmaceuticals Ltd, Baddi; CSIR - IHBT Palampur; CSIR, Jammu; Ferment Biotech, Kullu; Helix Biogenesis, Noida; ICAR- IISR, Lucknow, U.P.; Marc India Limited, Baddi; Marc Laboratories limited, Baddi; National institute of cancer prevention and research, Noida</p> <p>Patanjali Ayurveda Ltd., Haridwar, Uttarakhand Pranach Healthcare Pvt Ltd., Mumbai</p> <p>Radicular pharmaceutical, Delhi; Sentiss pharma Kera, Nalagarh; Sun Pharma, Baddi</p> <p>Tirupati Life science, Paonta Sahib; Verka; Central Agricultural University, Imphal</p> <p>Coca Cola, Chata, Mathura, U.P.; Cremica, Tahliwal, Una; CSIR, Palampur; DS Drinks and Beverages; Himalayan International Foods, Ponta Sahib; Hindustan Coca-Cola Pvt. Ltd., Gangyal, Jammu; HPMC, Jarol, Jubilant Food works Ltd., Greater Noida; Little Angels School; Monchy's Pvt. Ltd, Sadhupul; Mondelez India Foods Pvt. Ltd., Baddi; Nabila Food Products, Mumbai; National Dairy Research Institute, Karnal, Nestle' Ltd. Tahliwal, Una.</p>
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3.7.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc.

<b>Organization</b>
<b>2017-18</b>
<p>Seoul National University; Chung Yuang Christian University; University of Ulster; Best Team Nigeria Ltd; Bukovinian State Medical University Chernivist; Gachon University; The University of Suwon; Gwangju Institute of Science and Technology; The Pharmacy and Poisons Board of Govt. of Kenya; National Taiwan University - Taipei- Active; Lanzhou University; Sprott Shaw College; University of Arkansas; Fermi Research Lab; Sichuan University; University Alliance of Belt and Road; British Columbia Institute of Technology; Kabul University; Eshraq University</p>



University of La Verne; Samara National Research University; Inha University; IIB- INTECH, Buenos Aires; Ethiopian Environment and Forest Research; Hainan University; Yunan Agricultural University; Leshan Normal University; Xihua University; Yunan University; Cranfield University; KwaZulu-Natal University; University of Chittagong; Agriculture & Forestry Ministry; Hainan Tropical Ocean University; Rana University; Yunnan Minzu University Jimma University; Hawassa University; Wolkite University; Zion Technology and Business College; Wolaita Sodo University; Wondo Genet College of Forestry Science; University of Naples; APUIHEA; University of Limpopo; The University of Venda; UFRGS GENPACT; Tirupati Medicare Ltd.; Meridian Medicare Pvt. Ltd.; Anand Automotive Ltd.; Ferrites India Ltd.; Dron Defence Sez Pvt. Ltd; Nutra Helix Biotech Pvt. Ltd; Reliance Jio; DAMCO solutions Ltd.; Cyberoam; Venus Remedies Limited; Xcleris Labs, Ahmedabad; CSIR - Industry and Standards; CSIR - Biomedicine and Agriculture; Tata Consultancy Services; Bhabha Atomic Research Centre; Defence Research and Development Organisation, India

**2018-19**

University of Limpopo; The University of Venda; UFRGS; ANDMA; National Dong Hwa University; University of Reading; Western Sydney University; Ankara University; Slovak University of Agriculture  
Addis Ababa Medical and Business College, Metehara Campus; Addis Ababa Medical and Business College, Dire Dawa Campus; Addis Ababa Medical and Business College, Ziway Campus; Addis Ababa Medical and Business College, Piassa Campus; Jami University; Taj University; Vistula University; Rah award University; Kardan University; SenseAI Advisors; Benori KPO; ICVAST Global Health Solutions LLP; M/S Baijnath Pharmaceuticals Pvt.Ltd; Integrated Mountain Initiative, New Delhi; The Indian Planetary Society, Mumbai, India; Taj Institute of Higher Education; Jagdish Farms, UdhamSingh Nagar, Uttarakhand; Sr4ipr Partners; Tec Thirst

## CRITERION IV

### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 – Physical Facilities

##### 4.1.1 – Budget allocation, excluding salary for infrastructure augmentation

Year	Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
2017-18	Infrastructure	433.64
2018-19	Infrastructure	214.35

##### 4.1.2 – Details of augmentation in infrastructure facilities

Facilities	Existing or Newly Added
<b>2017-18</b>	
Existing: Campus area; Classrooms; Laboratories; Seminar Halls; No. of important equipment's purchased ( $\geq$ 1-0 lakh) during the current year. Value of the equipment purchased during the year (Rs. in Lakhs); Others; Open Air Theatre; Adventure Camp; Cineplex; Indoor Sports Complex; Faculty Club; Daffodils (Guest House); Playgrounds; Gymnasium	130.0
Newly added: Basketball. Volleyball, Badminton and Cricket pitch; Central gymnasium in the indoor Stadium; an additional facility for boys and girls hostel	32
<b>2018-19</b>	
Classrooms with Wi-Fi OR LAN; Video Centre; Seminar halls with ICT facilities; Classrooms with LCD facilities; Classrooms; Campus Area	Existing
Number of important equipment's purchased (Greater than 1-0 lakh) during the current year; Seminar Halls; Laboratories	Newly Added

#### 4.2 – Library as a Learning Resource

##### 4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

<b>2017-18</b>
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Mail, Messaging (Microsoft/Gmail cloud for students and faculty); Web content filtering & caching proxy; Gateway security & anti-spam; Application servers on Linux and windows; DHCP and RADIUS protocols; Library management services and online web catalog ; Many to Many Video-conferencing ;Helpdesk services ;Network security ; Key management services and DNS ; Wi-Fi campus on 802.11n with fault tolerance and load balancing ; Open source Learning Management System - eUniv ; Anti-plagiarism system ; Virtual classroom and eUniv ; Mail, Messaging (Microsoft/Gmail cloud for students and faculty); Web content filtering & caching proxy; Gateway security & anti-spam; Application servers on Linux and windows; DHCP and RADIUS protocols; Library management services and online web catalog; Many to Many Video-conferencing; Helpdesk services; Network security ; Key management services and DNS; Wi-Fi campus on 802.11n with fault tolerance and load balancing; Open source Learning Management System - eUniv ; Anti-plagiarism system; Virtual classroom and eUniv.
<b>2018-19</b>
KOHA; Duolingo (Language Lab); eUniv studio (Camtasia, Moodle)

#### 4.2.2 – Library Services

Particulars 2017-18	Total	
	No.	Value
Textbooks	37128	69.10 Lac.
Reference Books	5169	
e-Books	150000	
Journals*	10000	*
e-Journals		
Digital Database	4	-
CD & Video	1800	-
Others – Magazines	30	-
Newspapers	22	-

Particulars 2018-19	Total	
	No.	Value
Textbooks	42,430	84.11 Lacs
Reference Books	3,491	
e-Books	1,50,000	
Journals*	11,000	*
e-Journals		

Digital Database	4	-
CD & Video	1,810	-
Others – Magazines	35	-
Newspapers	25	-

4.2.3 – E-content developed by teachers such as: e-PG- Path Shala, CEC (under e-PG- Path Shala CEC (Undergraduate) SWAYAM other MOOCs platform NPTEL/ NMEICT/ any other Government initiatives & institutional (Learning Management System (LMS) etc.

All faculty members have created e-content on eUniv; Verified for 2018-19.

### 4.3 – IT Infrastructure

#### 4.3.1 – Technology Upgradation (overall)

##### Year 2017-18:

Library Automation. Though the entire Library is Wi-Fi enabled, following are provided:

- Total number of computers for public access : 24
- Total number of printers for public access : 2
- Intranet bandwidth for library : 100 Mbps
- Institutional repository : Through Intranet

Participation in resource sharing networks/consortia: eUniv, EBSCO, DELNET and Open Sources.

Year	Total Computers	Computer Lab	Internet	Browsing centres	Computer Centres	Departments	Available Bandwidth h (MBPS/ GBPS)
2018-19	393	6	1265	24	60	70	1265

#### 4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

1265
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#### 4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
eUniv Studios	<a href="https://www.youtube.com/watch?v=q0V5QnsGige">https://www.youtube.com/watch?v=q0V5QnsGige</a>

Radio Shoolini Media Centre	<a href="https://www.youtube.com/watch?v=pBmdBQ6nXY4">https://www.youtube.com/watch?v=pBmdBQ6nXY4</a>
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#### 4.4 – Maintenance of Campus Infrastructure

##### 4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
1403.5	1407.94	538.1	479.28

<https://shooliniuniversity.com/pdf/Maintenance%20of%20Academic%20Infra.pdf>

##### 4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

Submitted and verified. Major highlights are enumerated below:

Laboratory: Work flow from HOD to lab technician and lab attendant exists.

Maintenance of laboratories related to calibration, repairing and maintenance of sophisticated lab equipment's exist.

Library: Requirement and list of books is duly approved from HOD; feedback from students & faculty verified.

EBSCO platform is subscribed in library covering 12,000 journals 2 million books in fully downloadable formats.

Sports complex facility available.

Centralized computer laboratories available.

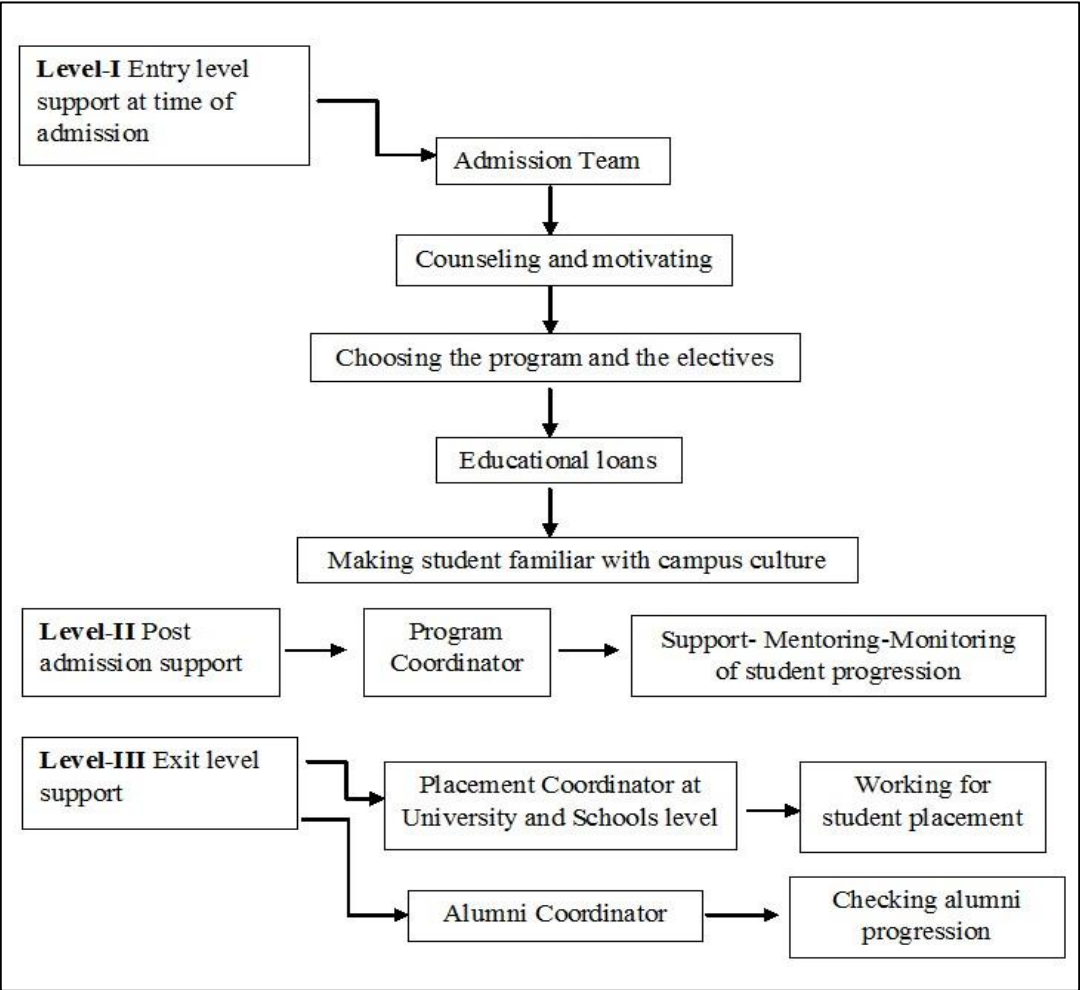
ERP software is used for maintaining faculty and students' details.

## CRITERION V

### STUDENT SUPPORT AND PROGRESSION

#### 5.1 – Student Support

##### 5.1.1 – Scholarships and Financial Support

Particulars	Name/Title of the scheme	Number of students	Amount in Rupees
<b>2017-18</b>			
 <pre> graph TD     L1[Level-I Entry level support at time of admission] --&gt; AT[Admission Team]     AT --&gt; CM[Counseling and motivating]     CM --&gt; CPE[Choosing the program and the electives]     CPE --&gt; EL[Educational loans]     EL --&gt; MSC[Making student familiar with campus culture]     L2[Level-II Post admission support] --&gt; PC[Program Coordinator]     PC --&gt; SMM[Support- Mentoring-Monitoring of student progression]     L3[Level-III Exit level support] --&gt; PCU[Placement Coordinator at University and Schools level]     PCU --&gt; WSP[Working for student placement]     L3 --&gt; AC[Alumni Coordinator]     AC --&gt; CAP[Checking alumni progression]         </pre>			
<b>2018-19</b>			
Financial Support from institution	Single Girl Child (Income Below Rs 5 lakh), Sibling Scholarship (Income Below Rs 5 lakh), Single Parent (Mother) Child, Merit-cum-Means Scholarship, Ph.D. Scholars, BPL Scheme, Employee/Ward Scholarship	885	30078259

National	Dr. Ambedkar Post Matric Scholarship Scheme, Kalpana Chawla Chakravarty Yojana Scheme, Post-Matric Scholarship Scheme to SC/ST/OBC Students	41	392000
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5.1.2 – Number of capability enhancement and development schemes for Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

<b>Detail of the capability Enhancement Scheme</b>
Skills Progression through Rapid Intensive and Innovative Training seminar for UG & PG Students on Entrepreneurship; Creativity and Innovation; Second Annual IPR Workshop; Codefest 1.0; INSPIRE Science Camp; Value & Importance of Yoga Through Open elective paper (Yoga for Spirituality & meditation)

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution

<b>Name of the scheme</b>	<b>Number of benefited students for competitive examination</b>	<b>Number of benefited students by career counselling activities</b>
University has incorporated many courses in the regular curriculum like courses on Personality Enhancement, Aptitude and analytical skills, NET/ GPAT/ GATE, AMFI (Association of Mutual Funds in India) Certification, IRDA (Insurance Regulatory and Development Authority) Certification etc. which has helped many students to clear competitive exams; Inspirational Leadership Sessions for UPSC Exams  Students qualified several exams NET, GATE, & others.		

**5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases**

<b>Year</b>	<b>Total grievances received</b>	<b>Number of grievances redressed</b>
2017-18	-	-
2018-19	0	0

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

<b>Year</b>	<b>Name of organizations</b>
2017-18	On campus: No. of Organizations visited= 118; No. of students participated=612; No. of students placed: 560; Off campus: No of students placed=22
2018-19	Nestle; AADOO Infotech Abbott; Accent Pharma Aishwarya Life Sciences Alchemist; Itruist; Technologies Amazing IT; Axis Bank Career Academy; Ceigall India Cipla Corona PVT LTD Solan Cremica; r. Morepen Labs DMI Housing Finance; Eazy Diner; Edelweiss FPL Future Generali; Genpact GNA; Havells' HDB Financial Services; HILTI; Hindustan Unilever, Hughes Systique ICICI BANK

### 5.2.2 – Student progression to higher education in percentage during the year

The presented data has been verified and a significant student progression exist.

### 5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

<b>Items</b>	<b>Number of students selected/ qualifying</b>
<b>2018-2019</b>	
GATE	2
NET	3
SET	1
Any Other	9



## 5.2.4 – Sports and cultural activities / competitions organised at the institution level

Year	Activity
2017-18	Shoolinis Got Talent - Dance Competition by Saksham Club; Cultural Show by Housekeeping Staff of Shoolini by women empowerment group; Manchtantra 2017; Cultural Show for Alumni; Visit Primary School by Prayas Group; Christmas Celebration @ Shoolini; Zumba @ Shoolini University; Women's Day Celebration; Flash Mob @ Solan Mall for Moksha 2018; "Beat IT" Dance Competition by Saksham Club; Labour Day Celebration
2018-19	Moksha; Foundation Day; Cultural of Artificial Intelligence Sprint; Independence Day Prerna Diwas; Republic Day; Table Tennis Tournament; Korfbal; Body Building; Body Building; World Yoga Championship; Table Tennis; Mountaineering cycling tournament; Badminton championship; Table Tennis; Basketball Tournament; International Yoga Day; Drug Awareness Drive; Swachh Bharat Abhiyan; Say No to Plastic Programme; Tree Plantation; Muscular Dystrophy; Prayas; Blood Donation Camp; Cleanliness Drive; 'Shoolini walk for life' on world cancer day; Fund raising during World Cancer week; Slogans & poster making on Women's Day; Cancer Detection Camp (Breast Cancer); Guest talk on gender equality; "Goonj cloth bags distribution" in villages; Village sanitation survey data collection; A visit to Primary School Bhajol; Free classes for underprivileged School students; A visit to Shilli orphanage; Quiz and games on World Women's Day; World Social workday; Visit to Cancer Ward, IGMC Shimla; "Sustainability Samwaad" with "Earth Just"; Shoolini campus visit of Dagshai orphanage students; Stationary collection during "The week of Giving"; Cloths collection during "The week of Giving"; Walk on World AIDS Day; A theatre play series on "Say No to drugs"; Village Clean-up; Cancer Awareness & Detention; Counselling Session of Patients; Drug Abuse & Awareness; Entertainment Activities with Senior Citizens; Street Plays + Rallies - Aim to Terminate Tobacco & Cancer; Muscular Dystrophy - Senior Citizen Engagement; Prayas - Say No to Drugs; Blood Donation Camp; Cleanliness Drive; 'Shoolini walk for life' on world cancer day; Fund raising during World Cancer week; Slogans & poster making on Women's Day; Cancer Detection Camp (Breast Cancer); Guest talk on gender equality; "Goonj cloth bags distribution" in villages; Village sanitation survey data collection; A visit to Primary School Bhajol; Free classes for underprivileged School students; A visit to Shilli orphanage; Quiz and games on World Women's Day;; World Social workday; Visit to Cancer Ward, IGMC Shimla

## 5.3 – Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Total No. of awards	Details of the Students
2017-18	03	Mr. Vivek Soni; Ms. Jasmine Kaur
2018-19	18	Vishal Sharma; Palvinder Thakur; Devesh; Preeti Rana; Vibhu Shukla; Mukul; Suraj Ravikant; Saurabh; Ravi Kant; Shoolini University Team

### 5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution

The details showed that the students, faculty, and staff are involved in several academic and administrative bodies/ activities of the institution at various level with responsibility and leadership skills in activities like ‘Raag rang’ for music and dance, ‘Saamarthya’ for entrepreneur development, ‘Baawle Bawarchi’ for cooking, ‘Shutterbugs’ for photography, ‘Dramebaaz’ for drama, the Tracking and Hiking club, under the umbrella of ‘Abhiruchi’. The Institution Innovation Council @ Shoolini is one among the best performing IIC’s of the country. Shoolini students are also actively involved in various Social Projects few are mentioned hereunder: YouWeCan Association started in 2016 for Cancer Awareness. Close to two dozen camps organized by HP, Chandigarh, and Punjab more than 2000 people are already screened for breast and oral cancer including Campaigns against drug abuse and tobacco cessation. Free health check-ups of housekeeping staff and women of Barog have been done. Care and Share group visits various places like IAMD hospital which had a regular inflow of patients with muscular dystrophy.

**5.4 – Alumni Engagement**

**5.4.1 – Whether the institution has registered Alumni Association?** Yes, available

**5.4.2 – No. of registered Alumni:**

**5.4.3 – Alumni contribution during the year (in Rupees):**

### 5.4.4 – Meetings/activities organized by Alumni Association

Alumni meet: Alumni meets, and city-specific chapters organized by university for regular interaction of alumni, to share their experience, to share their guidance and learning curve with each other. Alumni meets and alumni chapters provide a platform for teachers and ex-students to discuss various issues on a lighter note. Alumni meet details and chapters proof:

- a) Fourth Alumni Chapter, NCR: July 7, 2018
- b) Fifth Alumni Chapter, Tri-City: December 8, 2018.

## CRITERION VI

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 – Institutional Vision and Leadership

##### Vision

‘To be a top 200 global university by the year 2022’

The vision behind Shoolini University of Biotechnology and Management Sciences is to provide students with an opportunity to learn from and interact with top-most experts in their field of expertise. Efforts are made develop Shoolini University into an internationally recognized center of research and education. The University’s model is to blend expertise in biosciences with the principles and practices of engineering and business management to create exceptionally skilled human resource for future leadership positions in academia and industry. Some of India’s and the world’s most renowned academicians, scientists and business managers are already collaborating with the institute to make this vision a reality.

In a step toward fulfilling the vision of being amongst the top 200 universities by the year 2022;

##### Mission

1. To provide the ideal environment for higher learning with a serene & beautiful campus, state-of-the-art facilities & a creative atmosphere conducive to excellence in pursuit of knowledge.
2. Be a knowledge leader in our selected specialties in the academia and provide outsourcing and consultancy services to industrial/ organizational setups in this domain
3. Encourage our students to be “balanced specialists”, who excel in their own field, while being well-rounded through personality- development & extra-curricular activities.
4. Develop students who will be recruited by the best employers and who will contribute to the economic vitality of the state & country.
5. Create an environment to attract top faculty and build a pool of academic leaders by providing the right ambiance and resources.

##### 6.1.1 – Mention two practices of decentralization and participative management

A systematic structure of Academic Council coordinating for Faculty, School and department level and participation of different committees, School Academic Committee, Board of Studies, Research & Development Committee, and Examination Review Committee, etc. have been operated in a coordinated manner to make decisions with respect to academic and research-related issues. Student involvement is ensured through Class Representatives and Student Committees. 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. Governing body and the Board of Management are prime administrative bodies headed by the Chancellor and Vice Chancellor, respectively are functioning.

##### 6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

## 6.2 – Strategy Development and Deployment

### 6.2.1 – Quality improvement strategies adopted by the institution for each of the following

Strategy Type
Curriculum Development; Teaching and Learning; Research and Development; Library, ICT and Physical Infrastructure/ Instrumentation; Human Resource Management; Industry Interaction/ Collaboration; Admission of Students.

### 6.2.2 – Implementation of e-governance in areas of operations

E-governance area	Details
Planning and Development	myShoolini app for Timetable, Recording of Lectures and attendance, Feedback by students; MIS helps in distributing students in batches through batch management, the faculty subject allocation, allotting subject wise infrastructure. It allows students to select Choice Based Electives. At postgraduate levels, the allotment of research topics, research guides, Research seminars, and critical reviews are done using MIS systems; students and Employee Grievance module
Administration	Administrative MIS modules of the institution help in keeping service records of all the employees maintaining service books, promotion records, seniority, etc. myShoolini app for pending fee module to the students; Transport module; real-time GPS location of a university vehicle; Scival platform.
Finance and Accounts	Tally software ERP 9 to maintain and manage the inflow and outflow of the finances.
Student Admission and Support	Admissions and Marketing Automation CRM Software Extra Edge was implemented to streamline the admission process.
Examination	Strong room having standalone computers. 1. Online Moodle enabled tests. 2. ‘safe browser’ mode. 3. Online assignments, quizzes and viva voce introduced in a few courses. 4. All evaluated answer sheets are shown to students for any redressal if at all. 6. The hybrid pedagogy of online teaching through LMS blended with contact classes is in place for all courses across the university. 7. Encryption and decryption of roll no done to avoid student identity. 8. Double valuation check introduced to ensure that no question is left out and the total is correct. 9. The centralized evaluation system. 10. The result is declared within 1-2 weeks. 11. Plans for introducing a barcoding system is in place.

### 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

No. of Teacher	Financial support
	Advancing funds for sanctioned projects; Providing seed money; Simplification of procedures for sanction/ purchase; Autonomy to principal investigator; Timely release of grant; Timely auditing; Submission of utilization certificate Teachers 51; 2000-23500/-

6.3.2 – Number of professional development / administrative training programmes organized by the University for teaching and non-teaching staff

No. of training programs
Expansion of the University’s network and consolidate linkages; Focus on partnership and participative cooperation; Expand the scope of consultancy to provide the industry scientific solutions for their growth; Strengthen the mentorship program through industry mentors both for students and faculty; 39 programs organized in 2018-19.

#### 6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
227	227	147	147

#### 6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Monthly Birthday Celebrations, Free Education for the Children of Employees, Festival Celebrations (Diwali), Rewards Recognition (Pat on the back Award) and Support classes for Kids of Employees	Monthly Birthday Celebrations, Free Education for the Children of Employees, Festival Celebrations (Diwali), Rewards Recognition (Pat on the back Award) and Support classes for Kids of Employees	Ramps for differently abled students, Cultural activities, Regular sports tournament Activity students centre, etc.

### 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly:

The University has a mechanism for both internal and external audits. Internal audit is conducted by IQAC and Dean Academic Affairs and an external audit is conducted by a Chartered Accountant on an annual basis. Jagmohan Chohda Co are the external auditors since 2009.

Dean Academic Affairs and IQAC have been assigned the responsibility of conducting a detailed academic audit of each faculty/school. However, external experts are also invited to evaluate academic performance across the faculties. All academic activities of the school such as courses offered, teaching-learning methods, teaching and research facilities, number of faculty members and workload, research initiatives, conferences/workshops/seminars attended/conducted, books and papers published and research grants, etc. are evaluated. Recommendations of the academic audit are duly implemented in the subsequent period. The academic performance in each School is evaluated through the frequent meetings of Academic Committees under the chairmanship of Faculty Dean/HOS and the opinion of external experts is also taken to attain academic excellence.

<b>Details of Students Scholarship</b>			
<b>Sr. No.</b>	<b>Type of Scholarship</b>	<b>Amount</b>	<b>Remarks</b>
1	Single Girl Child (Income Below Rs. 5 lakh)	Equivalent to 10% of Tuition Fee/Year	Scholarship to continue subject to 75% class attendance
2	Sibling Scholarship (Income Below Rs. 5 lakh)	Equivalent to 10% of Tuition Fee/Year	
3	Single Parent (Mother) Child	Equivalent to 10% of Tuition Fee/Year	
4	Merit Scholarship for all Under Graduate programme based on Class XII Board exams.		
	A) All-State Education Boards 85-89% Marks 90-95% Marks 95% & above	Equivalent to 20% of Tuition fee for one year only Equivalent to 50% of Tuition fee for one year only Equivalent to 75% of Tuition fee for one year only	
	B) National Education Boards 90-95% Marks 95% & above	Equivalent to 50% of Tuition fee for one year only Equivalent to 75% of Tuition fee for one year only	
5	Merit Scholarship for Post Graduate Programme		
	A) For MBA/PGDBM/Executive MBA Programmes	For MBA total budget of Rs 5 Lakh given to Dean MBA for decision.	

	B) For other Post Graduate Programmes +85% marks	Equivalent to 15% of Tuition fee for one year only
6	Merit-cum-Means Scholarship	To be decided by a committee of the Foundation for Life Sciences & Business Management
7	For Ph.D. Scholars	Five University Assistantship equivalent to full fee

\*University is committed to seeking the best candidates without limitations of their financial backgrounds. Therefore, we follow a **Need-Blind admission policy**, where the University provides support, even up to full scholarship, based on each individual's specific financial need.

**6.4.2 – Funds/ Grants received from management, non-government bodies, individuals, philanthropies (not covered in Criterion III). (2018-19)**

Name of the non-government funding agencies /individuals	Funds/ Grants received in Rs.	Purpose
Sh. RK Khosla (50 lacs) and Prof. PK Khosla (10.99 lacs)	60,99,458	Cancer Research Centre and Yoga Huts

**6.4.3 – Total corpus fund generated**

3063.59 Lakhs as on 31 March 2018

4908.19 Lakhs as on 31 March 2019

**6.5 – Internal Quality Assurance System**

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Year 2017-18:

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	ISO 9001:2008	CSIO	√	IQAC & Dean Academic Affairs
Administrative	ISO 9001:2008	CSIO		

Year 2018-19:

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	ISO 9001:2015 Otabu	Yes	IQAC Dean Academic Affairs
Administrative	Yes	ISO 9001:2015 Otabu	Yes	IQAC Dean Academic Affairs

**6.5.2 – What efforts are made by the University to promote autonomy in the affiliated/ constituent colleges? (if applicable)** Not Applicable

**6.5.3 – Activities and support from the Parent – Teacher Association**

Being a higher education institute, university do not require a registered Parent – Teacher Association but parents are involved formally through feedback and online communication about the various activities and their wards performance. Also, they are invited for various events and activities organized in the campus, at the time of student admission, parents are well informed about the various procedures and their inputs wherever possible are duly implemented in the functioning.

**6.5.4 – Development programmes for support staff (at least three)**

- Firefighting Training organised at regular intervals for support staff
- SOP (Standard Operating Procedure) Trainings for Support Staff
- General Grooming Training for support staff on regular basis
- Preventive Maintenance programmes for support staff

**6.5.5 – Post Accreditation initiative(s) (mention at least three)**

- NBA Accreditation for B. Pharmacy and MBA program
- Great Place to Work Certification
- myShoolini Application
- Rankings – NIRF, India today Rankings, Outlook-ICARE University Rankings, and ELETS Rankings
- Radio Shoolini
- Research Awards
- New Programs - Law, Yoga, Agriculture, Hospitality, etc.



### 6.5.6 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	Yes
d) NBA or any other quality audit	Yes

### 6.5.7. - What efforts are made by the University/ Autonomous College for Examination Reforms?

- i. A minimum attendance criterion for appearing in the end term exam is strictly adhered to.
- ii. Online conduction and submission of question papers, assignments, quizzes etc.
- iii. Open book exam introduced
- iv. CBCS 10-point grading scale for examination introduced.
- v. Centralized Question paper setting strong room made operational.
- vi. Fully automated, paperless examination form filling system introduced.
- vii. The format of question papers, distribution of marks and evaluation process is informed in advance to all Deans/HOS's/Program directors and students.
- viii. Results are declared 1-2 weeks after the exam.
- ix. Results are immediately uploaded to the website and “my shoolini “dashboard on the same day.

### 6.5.8 – Number of Quality Initiatives undertaken

Total no. of Quality Initiative undertaken by IQAC
Parivartan - Support classes for kids of staff Radio Shoolini New programs for the Academic Year 2018-19 Research Awards National Board of Accreditation for B. Pharmacy & MBA Program my Tree-Save the Himalayas Employee Awards Noble laureate Subrahmanyam Chandrasekhar Gallery Dr. CV Raman Gallery

## CRITERION VII

### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Number of Participants	
	Female	Male
<b>2018-19</b>		
International Workshop on Human Trafficking in collaboration with HP State Commission for Woman	50	60

**7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:**  
Percentage of power requirement of the University met by the renewable energy sources

We have continued to improve the campus environment for students and staff, with new teaching research facilities, expanded students' accommodation and new study spaces. The library has been designed keeping in mind Green Building Technologies. The percentage of the power requirement of the University met by renewable energy sources is 40. With around 1300 solar panels, our campus is connected to a solar energy grid generating 400 kilowatts of electricity to meet our energy requirements. The most significant addition to the campus is the Yogananda library of the university.

We have envisaged on developing additional high-quality sporting amenities like the indoor sports complex with badminton and table tennis facilities for improving students' stay at the university. The addition of the gymnasium has provided an international look. In years to come, we expect the university to continue to prosper, making a strong and increasing contribution to the regional and national economy.

**7.1.3 – Differently abled (Divyangjan) friendliness**

Item facilities	Yes/ No	Number of beneficiaries
Ramp/Rails	Yes	1
Any other similar facility	Yes	1

**7.1.4 – Inclusion and Situatedness**

<b>Year</b>	<b>Number of initiatives to address locational advantages and disadvantages</b>	<b>Number of initiatives taken to engage with and contribute to local community</b>	<b>Name of Initiative</b>	<b>Issues Addressed</b>
2019	1	1	Parthenium Awareness Week	Awareness about noxious weed parthenium
2019	1	1	Kissan Mela	Problems of hill agriculture
2018	21	21	<p>Upliftment of Primary School Manjholi</p> <p>Confidence Building Activities for Underprivileged Kids</p> <p>Old age (Improving Life of the Old's)</p> <p>Afforestation of Solan District</p> <p>Awareness Remedial Classes for Underprivileged Women Children</p> <p>Awareness of Usage of Technology Among Students</p> <p>Waste Disposal System of Solan</p> <p>Community Participation in Urban Sanitation</p> <p>Govt. Initiated Maternal Schemes Related Awareness Camps in Collaboration with Anganbadi</p> <p>Role of Social Media on Swachh Bharat Abhiyan special focus on single use plastic</p> <p>Forest Conservation</p> <p>Disaster Management Awareness &amp; Preparedness at Shoolini</p> <p>Cancer Awareness &amp; Prevention</p> <p>Working Towards Entrepreneurship of Daily Wages in Shoolini University</p> <p>Plastic Free Campus and Surroundings &amp; other School</p> <p>Agriculture Awareness &amp; Innovation</p> <p>Financial Awareness with regards to Govt. Schemes among Rural Population Nearby Oachghat, Solan</p> <p>Meet Unemployed Persons, identify their potential and help them strategically in setting up their Entrepreneurial Activity</p> <p>Reversible and Irreversible consequences of Drug Abuse</p> <p>Creating awareness and informing the local community about the different Govt. Schemes for the benefit of society &amp; implementation of these at the grassroot level</p> <p>Holistic Development of Children in Shoolini Creche &amp; Anganbadi</p>	

2018	1	1	Himachal Pradesh (Chamba, Kullu, Manali, Shimla, Sirmour, Solan, Lahaul spiti, Una, Bilaspur), Uttarakhand (Vikasnagar), Panjab (Amritsar), Chandigarh, Delhi (Khari Baoli): Trade chain, trade pattern and value chain analysis of 5RET medicinal plant species	Regarding the price of wild and cultivated plants.
2018	1	1	Marathon	Helping Hand for Kerala
2018	1	1	Swach Bharat Abhiyan	Plastic Waste
2018	1	1	Ekta Diwas	
2018	1	1	Children's Day	Health & Hygiene
2018	1	1	Street Play for AIDS	AIDS
2019	1	1	Prerna Diwas	
2019	1	1	Women's Day	Women Empowerment
2019	1	1	Guru Talk by Pradeep	Garbage Disposal
2019	1	1	World Drama Day	Road Safety
2019	1	1	Ashwani Khad Clean-up	Garbage Disposal
2019	1	1	World Health Day	Health Check-up
2019	1	1	Labour Day	Medical Screening Camp
2019	1	1	Anti – Tobacco Day	Campaign against Smoking

### 7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up (max 100 words)
HR Manual	01/01/2019	It contains policies procedures with respect to different functions of university. It is reviewed after end of every year accordingly it is updated.
Guidelines on Code of Conduct for Research	02/08/2018	Advances in laboratory technologies have created complex ethical dilemmas. Laboratory services are an integral part of disease diagnosis, treatment, response monitoring, surveillance programmers and research.

Scientists engaged in field of Life Sciences		Therefore, personnel working in clinical / research laboratories should be aware of their ethical responsibilities. It is necessary to comply with the ethical code of conduct prescribed by national and international organizations, and address the emerging ethical, legal and social concerns in the field of biological and biomedical sciences. The basic principles enshrined in the codes and guidelines followed by us are Autonomy, Beneficence, Non-Maleficence and Justice
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### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

<b>Activity</b>
<p>Naturopathy Day; Propagating Principles of Yoga Worldwide (20 Days Yoga TTC Program for Chinese Delegates); International Day of Yoga with State Ayurveda Department</p> <p>Propagated Value &amp; Importance of Yoga Through Open elective paper (Yoga in Daily Life)</p> <p>Propagated Value &amp; Importance of Yoga Through Open elective paper (Yoga for Spirituality &amp; meditation); Propagated Value &amp; Importance of Yoga Through Open elective paper (Yoga in Daily Life); Propagated Value &amp; Importance of Yoga Through Open elective paper (Yoga for Spirituality &amp; meditation); Parthenium Awareness Week; Kissan Mela; Upliftment of Primary School Manjholi; Confidence Building Activities for Underprivileged Kids; Old age (Improving Life of the Old's); Afforestation of Solan District; Awareness Remedial Classes for Underprivileged Women Children; Awareness of Usage of Technology Among Students</p> <p>Waste Disposal System of Solan; Community Participation in Urban Sanitation; Govt. Initiated Maternal Schemes Related Awareness Camps in Collaboration with Anganbadi</p> <p>Role of Social Media on Swachh Bharat Abhiyan special focus on single use plastic</p> <p>Forest Conservation; Disaster Management Awareness &amp; Preparedness at Shoolini</p> <p>Cancer Awareness &amp; Prevention; Working Towards Entrepreneurship of Daily Wages in Shoolini University; Plastic Free Campus and Surroundings &amp; other School</p> <p>Agriculture Awareness &amp; Innovation; Financial Awareness with regards to Govt. Schemes among Rural Population Nearby Oachghat, Solan; Meet Unemployed Persons, identify their potential and help them strategically in setting up their Entrepreneurial Activity</p> <p>Reversible and Irreversible consequences of Drug Abuse; Creating awareness and informing the local community about the different Govt. Schemes for the benefit of society &amp; implementation of these at the grassroot level; Holistic Development of Children in Shoolini Creche &amp; Anganbadi; Marathon; Swach Bharat Abhiyan; Ekta Diwas; Children's Day; Street Play for AIDS; Purna Diwas; Women's Day; Guru Talk by Pradeep; World Drama Day; Ashwani Khad Clean-up; World Health Day; Labour Day; Anti – Tobacco Day</p>

### 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

- 1) my Tree - Save the Himalayas initiative – Geotagging of trees
- 2) Using garden waste for making compost
- 3) Rainwater harvesting system
- 4) Installation of PV Panels for harnessing solar energy
- 5) Installation of 3M water purification
- 6) Installation of ample number of Power Saving LED lights

## **7.2 – Best Practices**

### **7.2.1 – Describe at least two institutional best practices**

**Year 2017-18:**

#### **Best Practice – 1**

#### **Summit Research Program**

**1. Title:** B.Tech. Biotechnology (Summit Research Program)

**2. Objectives of the Practice:** To inculcate research practice and attitude to the highly motivated and aspiring researchers from the undergraduate degree program (B.Tech.)

3. The Context: Shoolini University offers a unique undergraduate (B.Tech) program in biotechnology where selected students have the opportunity to pursue the Summit Research Program that provides first-hand exposure to high-quality research in state-of-the-art global research environments, experience with writing and publishing papers and personal interaction with acclaimed research practitioners/experts from around the world.

The Summit Research Program is fully integrated with the regular engineering curriculum. The experience prepares Summit Scholars to the needs and requirements of reputed Global and Indian educational institutions, as well as leading corporate R&D departments. The scholars will be very well positioned to pursue higher studies in the world's best institutions, participate in high-tech startups, or pursue research careers in the corporate world. Throughout the four-year program, scholars are also mentored by highly qualified faculty/experts with global experience to assist and guide them in pursuing their passion.

In the first year, Summit Scholars are exposed to all research labs at the university. Students will not only learn the rationale behind on-going research but also become aware of its potential impact on society.

In years two and three, Scholars will deep dive into their assigned research projects, working and assisting the faculty/researchers with the research project lab work and analysis, contributing actively in hands-on research. Scholars will also assist in coauthoring research papers. Throughout the four-year program, Scholars will be exposed to institutional/corporate lab visits and interactions with acclaimed research practitioners to increase their exposure to current research best practices and innovations. Summit Scholars will each be assigned a mentor who will be available to them during the entire program for research and career guidance.

In the final year, mentors and faculty will also guide Scholars to prepare for admission applications such as for standardized test preparation i.e. GATE/GRE and selecting suitable Universities and Institutions. Scholars may get an opportunity to spend their final semester at a reputed foreign institution as an exchange student, for global lab research experience and exposure.

The research exposure and overall Summit Research Program experience will provide scholars with the USP required for selection for higher studies at reputed foreign institutions. It will also leave scholars better positioned to participate in start-ups, or pursue research careers in the corporate world.

**4. The Practice:** We have introduced an undergraduate program in Biotechnology (B.Tech.) Summit Research Program, where highly motivated and aspiring students are recruited from all India level. The selection was based on two rounds of interview apart from other minimum eligibility criteria. The students are grilled by the expert committee members and only a limited number of students are selected every year who are able to defend their research idea at the time of interview. The program was started from 2016 batch and in 2018 third batch was admitted to the program. The students are to undertake research projects in the area of their interest and it is on top of all the essential courses which are required for being eligible to get B.Tech. degree.

**The uniqueness about Summit Research Program is given below:**

- Opportunity to work directly with faculty and Ph.D. students on live research projects

- Participate in cutting-edge research in areas such as anti-cancer treatment, gene manipulation for improved crop yields and etiology of human diseases
- Visit and explore some of the best life-sciences research laboratories in the world
- Option to take courses or conduct lab work in premiere universities abroad
- Get mentored by reputed academics and teachers
- Opportunity to co-author a paper in a reputed Indian and International journal

Summit Scholars will each be assigned a mentor who will be available to them during the entire program for research and career guidance.

**Exposure to institutional/corporate labs through visits and interactions with acclaimed research and practitioners to increase their exposure to current research best practices and innovations.**

The few examples of foreign research labs where a student may go for the final semester of the Summer Research Program:

- **University of New Hampshire, USA:** Prof. Subash Minocha's Lab is working on genetic manipulation of plant metabolism and stress response in plants; cloning and characterization of genes involved in polyamine biosynthesis; and cloning and characterization of genes in marine algae for genetic manipulation.
- **University of Arkansas, USA:** Prof. Steve L. Stephenson's Lab is mainly working on two different subject areas: (1) the ecology of upland forest communities in the mid-Appalachian region of eastern North America and (2) the distribution and ecology of myxomycetes (plasmodial slime molds) and other eumycetozoans in terrestrial ecosystems.
- **University of Massachusetts, Boston USA:** Dr. Kamaljit Singh Bawa is a Fellow of the prestigious Royal Society, London. Prof. Bawa is an evolutionary ecologist, conservation biologist and a Distinguished Professor of Biology at the University of Massachusetts, Boston. Prof. Bawa is also on the global advisory committee of Shoolini University.
- **School of Life Sciences, Lanzhou University, PR China:** Prof. Xiangkai Li is a well-known Professor and Mentor at Lanzhou University, His lab works on the interaction between pollution and microbial communities and microbial remediations of environmental contaminations.
- **University of Otago Christchurch, New Zealand:** Prof. Christine Winterbourn is a research collaborator of Shoolini University. Professor Winterbourn's lab focus is on understanding mechanisms of reactive oxidant production, the biochemistry of biological damage and the consequences for disease pathology. Her current interests include the production of reactive oxidants by neutrophils and their involvement in microbial killing and inflammation, how neutrophils form extracellular traps (NETs), how thiol proteins contribute to antioxidant defense and redox-regulated cell signaling, biochemistry and cellular functions of mammalian peroxiredoxins, mechanisms of oxidative protein crosslinking and oxidant-antioxidant interactions in red blood cells.



**5. Evidence of Success:** The number of students who aspire to join the SRP program is increasing year by year, which showed immediate success to this program. In addition to that, the first and second batch students who have already made significant progress in their research projects have started writing and communicating their research findings in the form of research publications. The SRP students have been widely accepted in the first place for any summer or winter internship they apply. In the past summer break (July 2018) six of our first batch students have been invited by Sichuan University, PR China to attend two weeks University Immersion Program in Chengdu. The wider acceptability of our SRP students is clearly the evidence of the success of this program.

**Shoolini University's B.Tech Biotechnology graduates are already pursuing Masters programs at some of the most reputed universities in the world, including:**

- Stanford University, USA
- University of Bonn, Germany
- University of Windsor, Canada
- Gachon University, South Korea
- University of Tokyo, Japan
- Wageningen University, Netherlands

Summit Research Program Advisory Board Members include:



**Dr. Kamaljit Singh Bawa**  
 Prof. of Biology, University of  
 Department of  
 Massachusetts, Boston, USA.  
 University of  
 Fellow of the Royal Society  
 Evolutionary ecologist, Conservation  
 Specialist  
 biologist

**Dr. Rajendra Singh Paroda**  
 Former Director General, Indian  
 Council of Agricultural Research.

Acclaimed Indian Agriculture Scientist

**Dr. Steven L. Stephenson**  
 Research Professor,  
 Biological Sciences  
 Arkansas, USA.  
 Fulbright

**6. Problems Encountered and Resources Required:** SRP, being a research-intensive program is offered to only a limited number of students every year in comparison to the number of applications we receive from the aspiring researchers. The biggest problem in offering the program to a larger number of students is the availability of limited resources. We aspire to first expand the resources thus expanding this program to other disciplines so that the research training can be given in all the areas.

**Best Practice - 2**

1. **Title:** myShoolini Application
2. **Objectives of the Practice:** The application allows performing multiple activities such as marking attendances, tracking bus locations, submitting assignments, timetables, learning management system etc. on a single platform.
3. **Context:** In a pioneering move, Shoolini University launched the myShoolini application, a mobile-based virtual platform which helps its users to manage activities such as online attendance and fee payments on the go. With all the features in place, the students and staff who download the app will have access to all the university services and features through a single window interface.

myShoolini application was launched by Shoolini University Pro-Chancellor Satish Anand, this app has been jointly developed by the faculty and former students of the university. The app has launched the university towards becoming completely digital. With all the features in place, the students and staff who download the app will have access to all the university services and features through a single window interface. My Shoolini App is also available for download on the university website, Google Play & Apples store. This mobile-based virtual platform will help its users manage activities such as online attendance and fee payments on the go.

4. **Practice:** The application allows performing multiple activities such as marking attendances, tracking bus locations, submitting assignments, timetables, fee payment, learning management system etc. on a single platform.

Some of the key features of the app include the My Knowledge Hub which deals with research thesis and the Geo Selfie GPS enabled attendance system. This attendance system allows the staff to mark their attendance by clicking a selfie in the university campus. GPS enabled bus-tracking system allows students to track all the university buses for convenience.

## 5. Evidence of Success

- **Geo selfie attendance:** Employee in campus takes selfie attendance on the cell phone.
- **GPS enabled vehicle tracking system:** Student/Employee can see the location of bus/ car by logging in to the myShoolini application.
- **Digital library:** EBSCO platform provides a wide range of books to read ebooks.
- **Self-issue of books:** Books can be issued to the library by just scanning the barcode of any book.
- **Self-return of books:** Books can be returned to the library by scanning the barcode of any book.
- **Robust individual timetable:** Any student/employee can see the timetable under the menu to see their time & room number of their respective classes.
- **Extensive notification system:** Any notification to be communicated to shoolinian is shown on myShoolini app.
- **Used by over 1,000+ people:** As lots of features are available in the app, it has more than 1000 users.

**6. Problems encountered & resources required:** Earlier the connectivity of myShoolini app was hosted in-house only, however, now it is hosted on Amazon web server which has now full connectivity up to 100%.

#### **7.4 Contribution to environmental awareness/protection**

Since sustainability of the Himalayan eco-system is a thrust area for Shoolini University, it is incumbent that the focus is directed on the environment, especially since the University is nested in the Mid Himalayas. This includes taking up eco-preservation in an institutionalized manner and focused research for the rejuvenation of the eco-system.

It was for this purpose that the University started an 'Eco Club, in early 2012, with the aim of creating a 'Clean and Green Consciousness' on campus and progressively extending to the immediate neighborhood and the larger Himalayan Region. It was in pursuance with this aim that the University not only takes pride in being a 'neat and litter free' campus but being a part of the Prime Minister's 'Swachh Bharat Abhiyan' and undertaking research on Himalayan sustainability, individually and as part of the consortia of Himalayan Universities.

Students and faculty members of the university have been actively participating in Swachh Bharat Abhiyan started by the Prime Minister of India. On 2<sup>nd</sup> Oct 2016, the students and staff took the initiative of cleaning solan town. The university also installed dustbins at various places in the city. Similarly, on 2<sup>nd</sup> Oct 2017, the university's students and staff held a candle march to spread awareness about the Swachh Bharat Abhiyan of the Government. In addition, the students and staff of the university have regularly been involved in plantation activities.

The Shoolini university has always been concerned about the economic plight of marginal hill farmers. In partnership with the Yogananda Satsanga Society of India and University of Horticulture and Forestry, Nauni, Solan, the university has adopted the Panthi Village in Shimla District, HP, for plantation of fruit trees- with the objective of creating ecological conservation as well as creating a secondary source of income for farmers in this dry and arid region. On February 8, 2015, several plants were distributed to villagers. Since the adoption of the village, over seven thousand saplings have been distributed free of cost to the farmers. The survival of these plants and aftercare is monitored.

#### **Year 2018-19:**

##### **BEST PRACTICE 1: Enhancing Research**

1. Title of the practice: Enhancing Research
2. The context that required the initiation of the practice (100 – 120 words):

The vision of the Shoolini University is to be amongst top 200 global Universities by 2022 and we are focusing on our application to the University Rankings done by the Times Higher Education (THE). We have studied the ranking methodology and realized that THE gives almost 60 marks to either research or various research related activities. Thus, enhancing research is our top priority, as our rankings is going to provide us the much-needed recognition within India and across the world. We also realized that it is not possible to improve research output in a day, it's a continuous process and starts to show its impact only after 5 years or so.

3. Objectives of the practice (50 – 60 words):

The overall goal of the practice (Enhancing Research) is to improve the individual and Universities research output in a time bound manner. Following objectives are framed to achieve the goal a. To ensure that all the members of the Shoolini Family are aligned towards the goal and realize the importance of the same b. To provide the justifiable targets not only to the faculty members but also to the various Schools and Faculties c. To Monitor the individuals, progress so that the target can be met on time d. To act as a platform so as to promote maximum intra and inter departmental collaboration amongst the faculty members e. To promote faculty members to maximize international collaborations in their respective areas of research

#### 4. The Practice (250 – 300 words):

The practice is undertaken under the chairmanship of Hon'ble Vice Chancellor Shoolini University. Three stages of monitoring or checks need to be followed to ensure that the practice is met. Firstly, the departmental heads and deans need to motivate the faculty, staff and students working in their control to further improve their research output so that aspirations of the University can be met on time. All the deans collect the weekly progress data which is to be presented in the deans meeting every Monday. Monday deans meeting is a platform to discuss the weekly progress and to debate on the future course of action. The meeting is also a place to debate on whether any new support is to be provided to the faculty and students. To keep up with the pace and to meet the requirements of the faculty and students, University has subscribed to various research databases, amongst which EBSCO subscription is the first, which provides researchers the first hand information of the research papers in their respective fields and also provide the other relevant information. Secondly, University has also subscribed to Scival and SCOPUS, which helps the University and the faculty members to benchmark themselves and to find-out the potential collaborators. Thirdly University has subscribed to other resources like URKUND for plagiarism check and SPSS for statistical analysis. University has also formulated a Scientific Writing Cell which is responsible for providing writing and language correction support to the faculty members and students. The outcome of the support rendered by the Scientific Writing Cell is being more and more research papers are being accepted in the Journals of international repute.

#### 5. Obstacles faced if any and strategies adopted to overcome them:

The biggest obstacle in improvement of research output is that, it is not possible to predict future research output based on the existing resource and there is always a fear that we may miss the deadline by marginal numbers. In order to face it University has decided to increase its research workforce and thereby constituted the positions of research associates and Vice Chancellor Research Fellows, where a handful of young researchers have been recruited under the mentor ship of selected faculty members and the target to publish quality research papers have also been given to them.

#### 6. Impact of the practice (100 – 120 words):

The practice has been instrumental in raising the research output of the University as a whole. Number of publications has been substantially improved, not only numbers but the quality of the publications has also been improved. The impact of that can be easily seen by our research output in terms of Field Weighted Citation Impact (Which is one of the best in the country), percent international collaborations in research, Percent publications in top 10 most cited worldwide, Percent publications in top 1 most

cited worldwide and citation per publications. We are much ahead of our Indian counterparts in all the above-mentioned parameters and are rubbing shoulders with some of the world's best Universities.

#### 7. Resources required:

Quality Faculty and Research Staff: Special emphasis is being given to select the new faculty members for various departments, Research Associates and Vice Chancellor Fellows who are recruited as part of the practice are also handpicked based on their past performance and are monitored on quarterly basis. Research students: The bar for our research doctoral degree has been raised and as part of this practice, now the students are supposed to publish at least three research papers to be eligible for Ph.D. thesis submission. Other requirements of the faculty members in terms of software's and databases have also been met. All the research labs have been fully equipped and are now open 24x7 so that students can make the best use of the resources and improve the output

#### 8. Contact Persons for further details:

Dean, Research and Development Shoolini University of Biotechnology and Management Sciences Solan (HP) Phone: 09625033405 Email: [deanRD@shooliniuniversity.com](mailto:deanRD@shooliniuniversity.com)

**BEST PRACTICE 2:** Using Artificial Intelligence based training and coaching to prepare students for job Interviews

1. Title of the practice: Using Artificial Intelligence based training and coaching to prepare students for job Interviews

2. The context that required the initiation of the practice (100 – 120 words):

At Shoolini University graduating students are well equipped in terms of technical knowledge. However, it was felt that there is a gap in presentation and communication skills a key reason for this is the student profile - in terms of backgrounds from smaller towns and rural regions. As a result - because of their inability to express themselves - often competent students less affluent backgrounds got left out in job placements with the most preferred employers. In a broader context – this is an issue that impacts to a large number of graduates from Indian Universities who know their subject matter , but are not equipped from a communication and personality development perspective to fit into job profiles at leading MNCs and other companies.

3. Objectives of the practice (50 – 60 words):

Provide the 'Best in the world' communications and job interview preparation to identified students. Provide detailed unbiased reports to each of the identified students on how they can improve both the content as well as the style of delivery – so that they can perform at outstanding level in the most competitive interview.

4. The Practice (250 – 300 words):

Shoolini University introduced Artificial Intelligence based training and coaching system in 2019 for its MBA students. This commenced at the time of their first contact into their courses. For this purpose, an artificial intelligence-based software Siqandar.AI was used for training the entire batch of students.

It is important to highlight that this is the first time Artificial Intelligence Coaching software has been used in the education field in India - this technology is already being used by MNCs both for interviewing as well as for training their staff. How Siqandar.AI Works: Students log-in to the software and are asked typical questions which are asked by company recruiters.

They then record their answers to these questions in front of a computer. Siqandar.AI immediately assesses the student on the 3 Vs: Voice (how they speak), Vocal (content) and Visual (facial expressions, posture etc.) and provides individualized improvement tips. Using Siqandar.AI each student gets the chance to practice key interview questions as many times as they want as well as the equivalent of one-on-one and personalized coaching. Further they can practice their interview questions – just as if it were a video game – in an interesting format and at any time of the day.

5. Obstacles faced if any and strategies adopted to overcome them:

6. Impact of the practice (100 – 120 words):

- There has been significant student involvement in the initiative. For e.g. all students in a graduate course completed their Sikandar interaction within a short time of its being introduced. Further - gamification of outcomes, has resulted in enthusiast uptake across the student community.
- There has been a steep improvement in the placement outcome for the University. Several employers commented on the significant improvement in quality of student outcome. Further there has also been a sizeable increase in hiring from top companies.
- While previously Shoolini struggled to provide individual coaching, Siqandar.AI has

**Best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link**

<https://shooliniuniversity.com/pdf/BEST%20PRACTICES.pdf>

### **7.3 – Institutional Distinctiveness**

**Provide the weblink of the institution: verified**

<https://shooliniuniversity.com/pdf/Institutional%20Distinctiveness.pdf>

### **8.0 Plans of the institution for next year**

**For Year 2017-18:**

In the current scenario of globalization, academic institutions and universities cannot work in isolation. Institutions and universities are running against time to be on top and excellence in research and teaching will be key to success. It's only the institutes of national importance like Indian Institute of Science, Indian Institute of Technology and some very well established Universities which are keeping the Indian flag being seen in the globally recognized Institutions. India being a hub of academics needs to improve the mindset first followed by understanding the world top-ranked academic institutions and

then the ranking mechanism. Innovative and out of the box ideas need to be implemented in the Indian education system, only then the participation of Indian Institutions in the global platform is going to increase. Like anywhere in the world, Private educational institutions like Shoolini University have better chances to be on top of the world provided proper support and recognition is given to us from the Government of India.

We have established Shoolini University with a vision to be on the top 200 global Universities by 2022 and every step has been taken to realize and to fulfil this dream. Shoolini University is one amongst very few private Universities, who are established a giving prime emphasis on research. We believe that learning cannot be possible if it is not done in an innovative way, we at Shoolini has inculcated research into our day to day learning and academic practices and as a result of that, we are able to make our mark in the area of research and development in Biotechnology and related areas. Based on the latest data on research (from SciVal) Shoolini University has outclassed some of the top-ranked Indian Universities in number of research parameters (like field-weighted citation impact, international and national collaborations, paper published in the top 1% and top 10% journals) and we are now aiming to be in the league of global Universities in the years to come. Not only research we have also done innovation in teaching pedagogy and by starting new and innovative research-based undergraduate programs (like B.Tech. Biotechnology Summit Research Program). We at Shoolini are committed to our vision and every day, all the employees (teaching and non-teaching), students and University Management are living this dream to make Shoolini a globally recognized center of learning.

We at Shoolini University are now aiming to commercialize some of the notable patents along with filing more national and international patents and discussions for the same is underway. In our endeavor to become globally recognized University, we are now planning to expand our national and international collaborations and planning to submit more joint projects at national and international level. Our research and academic credentials have already started making a mark and we are getting endowment of Rs. 1 crore to establish Raj Khosla cancer center at Shoolini University, in addition, a grant of Rs. 5 crores were also committed to establish the center for research on yoga and naturopathy.

We will further strengthen our efforts on the following points:

- To substantially increase our funding support both from Govt. agencies and from private donors as an endowment.
- Establishment of the centre of cancer research and research center for yoga and naturopathy.
- To strengthen our social outreach, so that society can be benefited at large.
- To further improve the quality of in-house faculty by motivating them to complete their doctorate degree and by recruiting new experienced faculty members.
- To finish up the NBA accreditation of pharma school and management school

#### **For Year 2018-19:**

Our Future Plans envisage all 7 NAAC criteria. In order to extend its reach to students, Shoolini University is going for distance learning approval and the application is already filed with the appropriated authority. University did a pilot by offering 7 MOOC's courses that were successfully completed by the students. Looking at the increased demand of these courses University is now planning to offer at least 30 MOOC courses and one course will be made mandatory for all students.

University is also launching its own MOOC portal with five courses which are under preparation, further in this direction University has applied for UGC's SWAYAM and the subject experts from the university will soon be preparing courses for the same. In teaching and learning after the success of the B. Tech Biotech Summit Research Program, it is planned to be introduced in Pharmacy, B. Tech CSE and Food technology. University has also tied with Algo8, India's leading company in Artificial Intelligence which will provide an opportunity to the students for real-time projects. Curriculum wise we are hoping to introduce a few more certificate courses.

We have also applied for new courses in recent fields like Bioinformatics, artificial intelligence, etc. We also hope to revitalize mentoring. The Student Support Activities of our university is already vibrant. With regard to research Shoolini in the years to come plans to become one of India's lead Centre and directory of all floral and biodiversity plants, from distribution to its botany, ago practices, chemistry, genetic clinical variation, molecular characterization, therapeutic uses, drug delivery, everything till the genomic level.

All research in Shoolini is cantered on this direction. Shoolini has already started various initiatives to promote its researchers like research awards, intramural grants, allowances for attending conferences and workshops, etc. Shoolini is already having a high h index of 55 and a citation index of 2.18 which itself speaks for the quality of research done in University. The Council for Research in Yoga and Naturopathy (CCRYN) approved a 100-bed hospital to Shoolini University which will be called "Yogananda Medical School of Yoga Naturopathy". The hospital will be opened as a distinct facility for the people with the best of services and practices on affordable charges and will be equipped with specialized treatment sections, diet centre, recreation facility, Yoga and meditation hall, clinical pathology, library, herbal garden, conference hall, and residential area. Raj Khosla Cancer Research Institute will also be functional soon.

Through this institute, University plans to (a) Exploiting bioactive compounds for their role in controlling infectious diseases and cancer by stimulation or suppression of immune responses. (b) Development of biosensors for early-stage cancer diagnosis (c) Synthesis of green nanocomposites/nanoparticles for drug delivery, diagnosis, and cancer therapy.



## Overall Recommendations of Committee:

The details verified from the annual reports submitted for the year 2017-18 & 2018-19 were found valid and satisfactory. Following points were emerged from the observation made under the analysis put forward for AAA.

1. Shoolini University of Biotechnology and Management Sciences is noted as a distinctive place of innovation, research having vision to be amongst the top 200 global Universities by 2022. The data analysis presents as a research-driven university as being recognized for its focus on innovation, quality research and world-class faculty from ivy league world renowned institutions: institutions such as Oxford, University of California Berkley, Carnegie Mellon University, National Institute of Health, Washington DC, NIPER, NIH, IISC Bangalore, University of Konstanz Germany, IIT Delhi, Louisiana State University.
2. The research focus of the university includes research area like Exploring the medicinal wealth of Himalayas, Water purification, Research on Himalayan agriculture, Nanotechnology, Food Technology. The university secured competitive research grants from various govt. funding agencies like DBT, DST, ICMR, MoFPI, DRDO, HIMCOSTE, AYUSH, etc. with food testing laboratory from MoFPI, FIST proteomics lab from DST to name a few. The university has also received an endowment fund of 1 crore to develop a cent of cancer research. There are no. of awards and recognitions by faculty and researchers in various fields.
3. Shoolini University was founded to provide “world-class” education and learning experiences to distinctive and needy students from smaller towns and villages of India. Several distinctive scholarships to meritorious and needy students have been put forward by the institution
4. The major highlights of the university can be summarized with 360 patents; citation index of 2.15; H Index of 55, 200 Scopus papers per year, Alumni at Stanford, Columbia, INSEAD, Tokyo, GE, Ernst Young, Merrill-Bank of America, Marsh, Mercer, Nestle, Biocon, LG, Genpact, ITC, Dabur, HDFC, ICICI, and others; 101-150 Rank (NIRF) in India, Pharma College Rank 39 Business School Rank 51-75; 25 crores extramural research funding (DBT, DST, ICMR, DAE, DRDO, HIMCOST, MoFPI); and 180 Foreign partnerships.

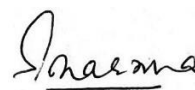
The overall assessment of the performance and activities made by the university found satisfactory and progressive to the vision aligned, and the committee recommend under the audit.



**(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