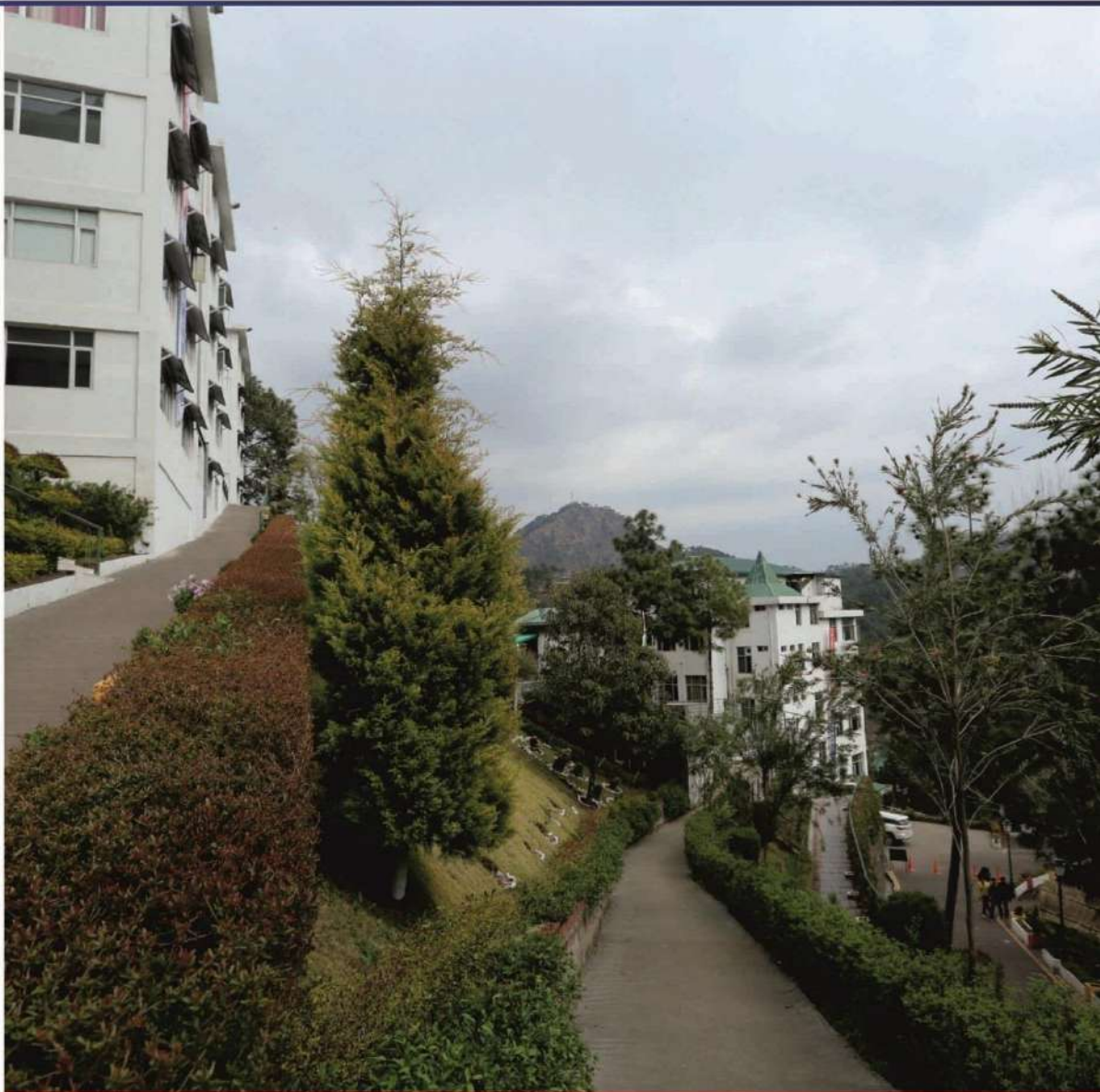


**SHOOLINI  
UNIVERSITY  
SOLAN, HP**

# **ANNUAL REPORT**



**For Academic Year 2020-21**

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## CHAPTER- I

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 1.1 - Institutional Vision and Leadership

Governed by Board of Management, which approves and takes all policy decisions as per varsity's statutes, based on long-term value rather than short term gains. The Vice-Chancellor, as Principal Executive, along with Deans, steers the university in fulfilling its Vision, Mission, and Objectives, allocating responsibilities, and setting up a review mechanism.

University follows and encourages participative management. All statutory bodies are constituted as per the statute and have representation from students and staff.

Vision: To be a top 200 global University by 2022

Mission: To make significant contribution to national development and establish world-class standards in education and research. It aims at:

- Providing world-class education particularly to students from smaller towns and lesser privileged classes.
- Establishing a distinctive platform for research and innovation.
- Preparing young graduates and postgraduates to excel in work and life.
- Through value-added education, enabling students to be happy individuals, good human beings. The efforts over years have paid dividends. NIRF rankings have placed the University at 89th position among all Universities. In latest QS Asia rankings Shoolini is ranked at 271- 280 position in Asia (in citations/paper it is ranked 1st in India and 6th in Asia. As per Scimago rankings, Shoolini ranked 545th in the world for research.

#### 1.2 Institutional Practices

Shoolini University prides itself on its democratic, consensus-based, and inclusive decision-making processes. The composition of all decision-making bodies is according to Shoolini University's Acts and Statutes.

The Governing Body and Board of Management are prime administrative bodies headed by the Chancellor and Vice-Chancellor respectively and have the best professionals as members. Global Advisory Board is constituted, which includes academicians and industry professionals from around the globe who are leaders in their fields to guide the university. The Academic Council, chaired by Vice-Chancellor, is constituted of all Deans, Head of Schools, Professors, select Associate Professors and Assistant Professors, and academic experts from outside the university. Likewise, Joint Research Development Advisory Committee and

Planning Board are represented by all Deans and Directors of university thus providing participative platforms for promoting teaching, research and extension. Library Advisory Committee, Admissions Committee, Sexual Harassment Prevention Committee, Student Grievance Redressal Committee, Anti-Ragging Committee, IQAC, etc., have various stakeholders as members. The university ensures that all positions in various statutory bodies are filled in time.

All in all, it is the effective leadership, good governance, professional advice and motivated wholehearted participation of all the stakeholders which has strengthened the varsity's foothold in the education world as a professional institution.

### **1.3 Strategy Development**

The popularity of university rankings reflects changes taking place in higher education globally. Rankings have become an important parameter for assessing a university's overall excellence and deployment of strategic plan and rankings validates through its carefully calibrated methodology whether the institute is moving in the right direction or not.

These are not only useful for policy makers, but also furnish information on an institution's standing. Shoolini University has undertaken to strive for excellence in research, in its endeavour to be among top 200 universities globally by 2022.

Shoolini University has already earned an enviable reputation for research excellence with h index 88 and 2171 SCOPUS publications. It earned 16th position in India (Research) and 545th Global rank in SCIMAGO rankings. In QS WORLD UNIVERSITY RANKINGS 2022 – it was positioned at 271-280 rank in Asia and no 1 in citations in the India (6th in Asia)

Within a short span of 10 years, it has acquired top place in Indian NIRF rankings with 89th position

,School of Pharmaceutical Sciences is ranked at 36th place and Business Management in the rank band 76-100 , Engineering at 103 rank. In the Atal rankings of Innovations it is ranked with Excellent Band.

### **1.4 Functioning of the University**

Shoolini University follows practices based on legality, impartiality, consistency, effectiveness, efficiency, and transparency.

The University Governing Council, Board of Management, and other bodies help in strategic governance associated with a broad range of activities related to performance management and institutional development, accountability, and stewardship for university capital (financial, intellectual, human/ manpower, reputations, etc.), and the development of an efficient work culture.

The competency of teachers and their appointments are followed as per UGC regulations. These regulations include a transparent and fair process for staff recruitment and conditions of employment and provide promotion opportunities to staff besides strengthening the link between teaching, research, and extension activities.

Programmes are designed in line with the university strategy and have explicit learning outcomes. All major stakeholders are involved in this process along with experts in the field. Regular feedback is taken from the students and suggestions are examined and implemented.

Prospectus/ Student’s Handbook has all the rules and regulations covering all phases of the student “Life Cycle,” i.e., admission, courses/Programmes, eligibility, progression, recognition, faculty, infrastructure of university, etc.

The Board of Studies and the Academic Council regularly monitor, review, and revise study Programmes as per mandates provided in the university regulations.

### 1.5 Implementation of e-governance

Sr.No.	Areas of e- governance	Year of implementation	Name of the Vendor with contact details
1	Administration	2014	AADDOO Softech Pvt. Ltd.,
2	Finance and Accounts	2009	Tally Soution Pvt. Ltd., Mr. Apoorv
3	Student Admission and Support	2015	NoPaperForms, Mr. Suraj Sapra: Almashines Technologies Pvt. Ltd., Mr. Aaron Joseph: +91 8511604412
4	Examination	2014	AADDOO Softech Pvt. Ltd., Mr. Sachin Sharma – 9816006440

### 1.6 Faculty Empowerment Strategies

A transparent appraisal system is done on a Fiscal Year basis for all employees & compensations are revised w.e.f. 1st April every year.

Separate Appraisals are designed for different categories of employees so that all relevant factors of performance are covered accordingly. Four Performance parameters for faculty:

## Teaching

Research/Innovation,  
Contribution to University,  
Personal development/ leadership.

**For non-teaching Staff:** Based on parameters fixed for their work and duties: Diligence to current work, Contribution beyond work.

An opportunity for all employees to present their previous year's achievements and contributions to the members of the Appraisal Committee.

## Welfare schemes:

- Provision of medical leave and on-campus medical facilities.
- Exclusive facilities for women in women's centre, including a creche.
- Subsidized transportation.
- Incentives for higher qualifications/generating research grants.
- Encouragement with subsidies to attend conferences and seminars.
- Special facilities for differently-abled.
- Monthly Birthday Celebrations.
- Free Education for Children of Employees.
- Festival Celebrations round the year with occasional bonuses.
- Rewards Recognition (Pat on back Award).
- Golden Rudraksha Awards for employees and staff are given based on peer assessment.
- Provident Fund, ESI, Gratuity, maternity benefit to women, etc., as per different acts + working mother & paternity policy
- weeks free yoga Certification – LLY

### 1.7 Financial support to attend conferences / workshops

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Amount of support
2020	Vikas Mehta	Construction World: Material Technology	1570
2021	Atul Khosla	Education Panel III: Disruptions in Higher Education: India's Opportunities in 2020s & Beyond	19402
2021	Gaurav Gupta	Artificial Intelligence Enabled Plant Emotion Xpresser in the development Hydroponics System	16000

### 1.8 Professional development / administrative training Programmes organized by the University

Sr. No.	Dates	Title of the professional development program organised for teaching staff	Title of the administrative training program organised for non-teaching staff	No. of participants
1	28-01-2021 to 28-01-2021	Workshop on eUniv portal (Hot question activity, Group assignment, Course Recycle bin, Download Instructor files)	–	123
2	11-03-2021 to 11-03-2021	Workshop on effective Teaching with Technology by eUniv team	–	108
3	14-10-2020 to 15-10-2020	Workshop on Human Right and Child Abuse	–	148
4	03-11-2020 to 03-11-2020	Training program on National Education Policy 2020 for Faculty of Sciences	–	78
5	18-01-2021-22-01-2021	Workshop on AutoCAD to ALL by department of Mechanical, Civil & Electrical Engineering	–	64
6	26-07-2021-30-07-2021		Workshop on Vehicle maintenance by school of Mechanical, Civil and Electrical Engineering.	15
7	20-02-2021 to 21-02-2021	Yoga International Conference on Contemporary Issues In Social Sciences	–	54
8	11-02-2021 to 11-02-2021	Training program on Technical intro, Virtual Choir Concepts , Learning & Teaching application for Choirless by eUniv team	–	178
9	25-02-2021 to 25-02-2021	Training program on Mindful Art by Mrs. Ashoo khosla and Dr. Kamal Kant Vashisth	–	407

10	25-03-2021 to 25-03-2021	Training program on Video Editing & Other Exciting eUniv Updates by eUniv team	–	125
11	22-04-2021 to 22-04-2021	Training program on Coaching: The road to Self-Discovery by eUniv team	–	97
12	13-05-2021 to-13-05-2021	Workshop on Implementation of New Education Policy at Shoolini	–	186
13	27-05-2021 to 27-05-2021	workshop on Understanding NEP Implementation at Shoolini	–	152
14	04-06-2021 to 04-06-2021	Training on My shoolini portal (Submission of awards for Internal + End-term on MyShoolini) for all faculties throughout the university.	–	162
15	19-07-2021 to 19-07-2021	Training on understaing the Higher Education Teaching: The Past and Present by eUniv team	–	276
16	19-07-2021 to 19-07-2021	Session on Aiming for the StarsSecrets to Achieving Excellence in Online Teaching for all faculties throughout shoolini	–	167
17	20-07-2021 to 20-07-2021	Workshop on Student Centric Approach to Teaching Through Design Thinking by eUniv team	–	184
18	20-07-2021 to 20-07-2021	Workshop on Redefining teaching (Designing Instruction and Assessments) by learning and development team	–	154
19	21-07-2021 to 21-07-2021	Workshop on Easy AI Tools for Teaching by learning and development team	–	309
20	21-07-2021 to 21-07-2021	Training on understanding how Technology Changes Learning by learning and development team	–	154
21	22-07-2021 to 22-07-2021	Workshop on Tools to Improve Visual Instruction Material & Using Social Media for Instruction (Mr. Bhanu Pratap Solanki)	–	185
22	22-07-2021 to 22-07-2021	workshop cum training on What Makes a Great Presentation by learning and development team	–	146



23	23-07-2021 to 23-07- 2021	Training on Changed Role of Students and Teachers in the Hybrid Model by learning and development team	–	159
24	24-12-2020 to 26-12- 2020		Workshop on MS Excel Training for non teaching staff	18
25	01-02-2021 to 02-02- 2021		Training on No Paper Forms portal - LMS Training for non teaching staff	19
26	12-11-2020 to 12-11- 2020		EBSCO Training for Library Staff	204
27	20-05-2020 to 21-05- 2021	The Quest for Equilibrium, Online International Conference Media and Law	–	53
28	10-03-2021 to 12-03- 2021		Admissions Counselling Training	17
29	23-07-2021 to 23-07- 2021	FDP on Mastering Blended Learning by eUniv Team for all faculty	–	192
30	24-03-2021 to 24-03- 2021		Workshop on Examination Module	5

## 1.9 Financial Management and Resource Mobilization

A three-pronged strategy was adapted to generate and manage adequate resources to build a quality institution. Research Funding through Grants from agencies like DBT, GoI, DSIRO, etc., non-governmental bodies have also funded specific research and consultancy projects. The mission of university is to make research funding and income through technology & patent transfer as the strongest revenue source over the years.

1. Student Fee and Related Services: Shoolini University hosts around 3800+ students, of which 2000+ reside on campus. A nominal fee as approved by the state authorities is charged.

2. Donation and grants from philanthropists and CSR funds: Over years, many philanthropists and corporate have contributed and helped more than 220 students. An amount of Rs. 2.5+ crores have been generated almost 24% students have been given scholarships/freeships

University prepares its goals and agenda annually. The budget is cleared through the varsity's Finance Committee, BoM and Governing Council. A mid-year review is undertaken to realign the budget. Post closure of each Financial Year, an external audit is conducted through a reputed auditing agency and the audit report is presented in the Management Committees. A separate Development and Infrastructure Budget is funded by the sponsoring body to strengthen the Campus.

#### 1.10 Funds / Grants for Food Testing Lab

Year	Name of the government funding agencies	Purpose of the Grant	Funds/ Grants received (INR in lakhs)
2020-21	Ministry of Food Processing Industry, New Delhi	Setting up of food testing laboratory	13.67

#### 1.11 Internal and External Financial Audits

The University has a mechanism for both internal and external audits. The internal audit is conducted by both internal agencies and external agencies. The timelines for the audit are stringently adhered to and executed with due diligence. The statutory audit is done once in a year, whereas the internal audit is conducted quarterly or as per the decision of the management.

A statutory auditor is appointed, under the university's regulation

Audit objections are settled through various procedures ensuring uniform compliance. We make sure that objections raised in the audit reports may not be repeated in the following years for the reason whatsoever it may be. All the objections are being taken care of and compliance made in the stipulated period and put up before the management along with an audit report to ensure the quality and reliability of the compliance prepared regarding the objection raised by the statutory auditors.

## CHAPTER - II

### TEACHING-LEARNING AND EVALUATION

#### 2.1 Student Enrolment

<b>Programme Name</b>	<b>Number of seats available/ sanctioned</b>	<b>Number of Students admitted</b>
B.Com (Hons.)/ BBA	130	130
B.Sc (Hons.) Biotechnology/ Food Technology/ Microbiology	85	83
B.Sc (Hons.) Chemistry/ Zoology/ Physics	30	29
B.Sc Mathematics	15	15
B.Sc Hospitality and Hotel Administration	20	20
B.Sc Nutrition and Dietetics	10	10
B.Sc Yoga	25	25
BA (Hons.) English/ Pass Course	30	30
BA Journalism and Mass Communication	25	24
BCA	15	15
LLB	60	13
B.Pharmacy	100	98
B.Sc (Hons.) Agriculture	60	60
B.Tech Biotechnology/ Food Technology	105	105
B.Tech Civil	15	14
B.Tech CSE/ IT	120	120
B.Tech EE/ECE	10	8
B.Tech Mechanical/ Automobile Engineering	15	15
BALLB	60	58
LLM	15	14
M.Pharma Pharma Chemistry	15	12
M.Pharma Pharmaceutics	12	12
M.Pharma Pharmacognosy	3	3
M.Pharma Pharmacology	12	11
M.Sc / MA Mathemactics/ Data Analysis	12	12
M.Sc Biotechnology/ Microbiology/ Food Technology	105	105
M.Sc Chemistry/ Physics/ Zoology/ Botany	70	70
M.Sc Environmental Sciences	4	4
M.Sc Agriculture	20	18
M.Sc Nutrition and Dietetics	10	10
M.Sc Yoga	5	5
M.Tech Biotechnology/		

Food Technology	27	25
M.Tech Civil	5	5
MA Economics/ Literature	5	4
MBA	120	115
Ph.D (Biotechnology, Food Technology, Microbiology, Physics, Chemistry, etc.)	105	105
<b>Total</b>	<b>1475</b>	<b>1402</b>

## 2.2 Students admitted under Reserved Categories

SC	ST	OBC	Gen
298	138	375	2918

## 2.3 Student's Learning Categories

Shoolini has implemented pivotal measures and special academic programs:

### Advanced Learners

Flip Classroom is offered using Shoolini's eUniv LMS platform

- Coaching for competitive exams are offered Online Certification Courses 5000 edX coupons and 4000 Coursera coupons for online courses for students & faculty.

Live/other projects in the form of additional challenging assignments, participation in symposiums, presentations, research papers and patent writing are encouraged.

### Medium Learner

- Proficiency Test in English is conducted for all UG students prior to commencement of the program to assess their learning level.

Foundation/ Refresher Courses are offered in (i) Physics, Chemistry, and Math for Core Engineering students; (ii) Quantitative techniques Accounts for Management students; and (iii) Biology for Pharma, Biotechnology & Food Technology students.

Remedial Courses are offered for students who are weak in certain subjects Slow Learners

Proficiency Test in English is conducted for all UG students prior to the commencement of the program to assess their learning level.

Tutorial classes provide support to slow learners Online Certification Courses

are facilitated through several platforms for online learning. Students are encouraged to learn on NPTEL/ MOOC & NISM platforms

#### 2.4 Student - teacher ratio

Number of Students	3729
Number of Teachers	227

#### 2.5 Teaching- Learning Process

The University has widely adopted a pedagogy which is essentially aligned with the Bloom's Taxonomy. The faculty was trained to teach and take lectures mostly on Application (Experiential), Analysis (Participative) and Creation (Problem-solving) levels of taxonomy levels.

- Application of Flipped Classroom Model, wherein the content is made available to the class beforehand through our LMS eUniv and textbooks. Face-to-face time in the lecture to be utilized for a more insightful discussion and problem-solving.
- The concept of Blended learning is fully functional in the university. Case-studies present the students with a unique combination of experiential learning focused towards developing their problem-solving abilities.
- Apart from the laboratory and tutorial time slots, there are regular Industrial & Field visits let the students learn from live environment.
- Faculty and student exchange programs are run towards providing much needed national/ international exposure to worthy candidates.
- Participation in curricular, co-curricular and extracurricular activities at inter and intra- University competitions (symposia, declamation contests, participation in clubs, tech fests, sports, cultural events, etc.) also help the cause.
- Involvement in social activities, such as plantation, cleanliness, blood donation, awareness camps, school adoption program, etc. instills much needed social responsibility in the minds of future nation builders.

Shoolini University is frontrunner in the field of using ICT enabled tools and online

resources for improving the quality of education and effective teaching.

1. eUniv is the university’s integrated online teaching platform launched by former President of India, Dr. APJ Abdul Kalam in the year 2013. Since then, the University has made rapid strides, blending the latest ICT tools into our academic culture.
2. Own content: eUniv has its base of 600+ online courses content as presentations, PDFs, Open- Educational-Resources, video lectures, webinar-recordings, etc.
  - OER resources: Faculty use a comprehensive list of OER resources.
  - MOOCs: The University uses various online MOOCs to facilitate teaching-such as Swayam, Coursera, EDX, and FirstUniv
  - Virtual labs: The University uses virtual labs for lab classes
  - Secure and steady assessment structure: Faculty can take online assignments, quizzes, etc. Shoolini University is one of the first Universities in India to integrate real-time proctoring, with random question assignments for examinations.
1. myShoolini App: An all-purpose mobile-app “myShoolini” was introduced in the year 2017, which consists of GPS-based attendance system, student-grievance-redressal, LMS, Shoolini\_radio etc.
2. Online databases: The university provides access to several online databases including EBSCO, Scival, DELNET, etc.
3. Language lab: There is language lab for learn three languages German, Spanish, and Mandarin.
4. Ultra-high-speed internet: All academic blocks & hostels are 24\*7 Wi-Fi-internet connected through Optic-Fibber Broadband and protected with sonic firewall.
5. Video conferencing: This facility and Live streaming of webinars is available at several access points across the university.

**2.6 Number of mentors:** 159

**2.7 Total Number of teachers:** 227

<b>Sr.No.</b>	<b>Name of the Full-time teacher</b>	<b>Designation</b>	<b>Name of the Department</b>	<b>Total years of Experience in the same institution(as on 31-08-2021)</b>

<b>1</b>	Raj Kumar	Associate Professor	School of Mechanical, Civil & Electrical Engineering	7.11
<b>2</b>	Raj Kumar Saini	Associate Professor	School of Mechanical, Civil & Electrical Engineering	11.1
<b>3</b>	Ram Prakash Dwivedi	Professor	School of Mechanical, Civil & Electrical Engineering	8.5
<b>4</b>	Robin Thakur	Associate Professor	School of Mechanical, Civil & Electrical Engineering	9.9
<b>5</b>	S S Chandel	Professor	School of Physics & Materials Science	2.6
<b>6</b>	Abhilash Pathania	Associate Professor	School of Mechanical, Civil & Electrical Engineering	10
<b>7</b>	Abhishek Mehrotra	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	0.5
<b>8</b>	Amar Raj Singh	Associate Professor	School of Mechanical, Civil & Electrical Engineering	10
<b>9</b>	Amit Kumar	Associate Professor	School of Advanced Chemical Sciences	10.1
<b>10</b>	Amita Verma	Other	School of Mechanical, Civil & Electrical Engineering	0.4
<b>11</b>	Amrit Pal Singh	Assistant Professor	School of Advanced Chemical Sciences	1.11
<b>12</b>	Anil Kumar	Assistant Professor	School of Bioengineering and Food Technology	2
<b>13</b>	Anirban Saha	Assistant Professor	School of Physics & Materials Science	3.1

<b>14</b>	Anuj Kumar Poonia	Assistant Professor	School of Biotechnology	0.7
<b>15</b>	Arunava Poddar	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	0.7
<b>16</b>	Arvind Nanda	Professor	School of Mechanical, Civil & Electrical Engineering	8.4
<b>17</b>	Arvind Singh Bisht	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	0.1
<b>18</b>	Ashok K Pathera	Assistant Professor	School of Bioengineering and Food Technology	4
<b>19</b>	Ashwani Sharma	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	9.11
<b>20</b>	Bharti Thakur	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	10.11
<b>21</b>	Bhaskar Goel	Professor	School of Mechanical, Civil & Electrical Engineering	4.3
<b>22</b>	Bhupende r Kumar	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	5.2
<b>23</b>	Brijbhushan	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	8.6
<b>24</b>	Chandrika Attri	Assistant Professor	School of Biotechnology	12
<b>25</b>	Dinesh Kumar	Professor	School of Bioengineering and Food Technology	10.1
<b>26</b>	Dinesh Singh	Professor	School of Mechanical, Civil & Electrical Engineering	0.3



<b>27</b>	GK Sharma	Professor	School of Agriculture	7.9
<b>28</b>	Gunjan Thakur	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	4.1
<b>29</b>	Gururaj Kudur Jayaprakash	Assistant Professor	School of Advanced Chemical Sciences	1.8
<b>30</b>	Hemant Sharma	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	5.11
<b>31</b>	J M Julka	Professor	School of Biological & Environmental Sciences	10.1
<b>32</b>	Joydeep Das	Associate Professor	School of Advanced Chemical Sciences	3.7
<b>33</b>	Lobzang Stanzen	Assistant Professor	School of Agriculture	3.4
<b>34</b>	Mahesh Kumar	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	5.6
<b>35</b>	Manju Jaidka	Professor	School of Business Management and Liberal Arts	1.7
<b>36</b>	Mansoor Ali	Assistant Professor	School of Agriculture	2
<b>37</b>	Meenakshi Nayyar	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	9
<b>38</b>	Mohindra Singh Thakur	Professor	School of Mechanical, Civil & Electrical Engineering	5.11
<b>39</b>	Nagesh Kumar	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	3.1
<b>40</b>	Namita Gandotra	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	8.3
<b>41</b>	Navsal Kumar	Assistant Professor	School of Mechanical, Civil & Electrical	0.5

			Engineering	
<b>42</b>	Nitin Kumar Sharma	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	7.11
<b>43</b>	Nitisha Sharma	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	2.1
<b>44</b>	Pankaj Kumar Chauhan	Associate Professor	School of Bioengineering and Food Technology	9.5
<b>45</b>	Pankaj Raizada	Associate Professor	School of Advanced Chemical Sciences	3.8
<b>46</b>	Pankaj Vaidya	Associate Professor	Yogananda School of AI, Computer and Data Sciences	11
<b>47</b>	Parvani Sharma	Assistant Professor	School of Agriculture	3.1
<b>48</b>	Parveen Sihag	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	1.7
<b>49</b>	Prachi Agrawal	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	0.2
<b>50</b>	Pradeep Kumar	Assistant Professor	School of Biotechnology	3.4
<b>51</b>	Prem Kumar Khosla	Professor	School of Biological & Environmental Sciences	11.1
<b>52</b>	Purnima Bali	Associate Professor	School of Business Management and Liberal Arts	4.4
<b>53</b>	Rachna Verma	Associate Professor	School of Biological & Environmental Sciences	10.1

<b>54</b>	Radha	Assistant Professor	School of Biological & Environmental Sciences	3.3
<b>55</b>	Rahul Thory	Assistant Professor	School of Bioengineering & FT	6.6
<b>56</b>	Rahul Yadav	Other	School of Bioengineering and Food Technology	0.1
<b>57</b>	Rajesh Sharma	Professor	School of Physics & Materials Science	16.11
<b>58</b>	Rammani Adikari	Assistant Professor	School of Physics & Materials Science	2
<b>59</b>	Ravinder Nath	Associate Professor	School of Agriculture	1
<b>60</b>	Rupak Nagraik	Assistant Professor	School of Bioengineering and Food Technology	9.6
<b>61</b>	Sachin Sharma	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	10.1
<b>62</b>	Sashank Thapa	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	7
<b>63</b>	Satish Kumar Gupta	Professor	School of Agriculture	2.7
<b>64</b>	Somesh Sharma	Professor	School of Bioengineering and Food Technology	9.4
<b>65</b>	Sonali Khanduja Kalra	Assistant Professor	Faculty of Applied Science and Biotechnology	3.1
<b>66</b>	Sorabh Aggarwal	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	4.3
<b>67</b>	Subodh Singh      Saurabh	Associate Professor	School of Business Management and Liberal Arts	3.3
<b>68</b>	Sushil Kumar	Assistant	School of Mechanical, Civil &	9

		Professor	Electrical Engineering	
<b>69</b>	Tej Nath Dhar	Professor	School of Business Management and Liberal Arts	0.7
<b>70</b>	Veena Kashyap	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	5.2
<b>71</b>	Vikas Kumar	Assistant Professor	School of Biotechnology	6.9
<b>72</b>	Amar Rao	Assistant Professor	School of Business Management and Liberal Arts	8.1
<b>73</b>	Ankita Verma	Assistant Professor	School of Business Management and Liberal Arts	2
<b>74</b>	Anurag Kumar	Assistant Professor	School of Agriculture	0.9
<b>75</b>	Ashish Khosla	Professor	Yogananda School of AI, Computer and Data Sciences	2
<b>76</b>	Atul Khosla	Dean / Principal / Director / Vice Chancellor	School of Business Management and Liberal Arts	10.2
<b>77</b>	Chandresh Kumari	Assistant Professor	School of Biotechnology	5
<b>78</b>	Kamalkant Vashisth	Associate Professor	School of Business Management and Liberal Arts	9.1
<b>79</b>	Kesari Singh	Professor	School of Business Management and Liberal Arts	11
<b>80</b>	Kuldeep Chand Rojhe	Professor	School of Business Management and Liberal Arts	13.6
<b>81</b>	Mala Tripathi	Assistant Professor	School of Business Management and Liberal Arts	3.3
<b>82</b>	Narinder Verma	Professor	School of Business Management and	8.1

			Liberal Arts	
<b>83</b>	Nisha Kapoor	Assistant Professor	School of Business Management and Liberal Arts	2
<b>84</b>	Nitika Thakur	Assistant Professor	School of Biotechnology	4.9
<b>85</b>	Nitin Gupta	Associate Professor	School of Business Management and Liberal Arts	11
<b>86</b>	Pooja Verma	Associate Professor	School of Business Management and Liberal Arts	8.7
<b>87</b>	Prachi Kapil	Assistant Professor	School of Business Management and Liberal Arts	7
<b>88</b>	Rozy Dhanta	Assistant Professor	School of Business Management and Liberal Arts	11
<b>89</b>	Sakshi Sundaram	Assistant Professor	School of Business Management and Liberal Arts	1
<b>90</b>	Sandeep Singh	Assistant Professor	School of Business Management and Liberal Arts	0.9
<b>91</b>	Shankahar oop Ghoshal	Assistant Professor	School of Biological & Environmental Sciences	4
<b>92</b>	Shubham Verma	Assistant Professor	School of Business Management and Liberal Arts	4.3
<b>93</b>	Sunil Puri	Professor	School of Biological & Environmental Sciences	10.11
<b>94</b>	Vinay Negi	Assistant Professor	School of Business Management and Liberal Arts	3.8
<b>95</b>	Y S Negi	Professor	School of Agriculture	6.3
<b>96</b>	Abhishek Kumar Sharma	Assistant Professor	School of Pharmaceutical	3.7

			Sciences	
<b>97</b>	Astha Tripathi	Assistant Professor	School of Biotechnology	10
<b>98</b>	Gaurav Sharma	Assistant Professor	School of Pharmaceutical Sciences	8.11
<b>99</b>	Aditi Sharma	Assistant Professor	School of Pharmaceutical Sciences	5.5
<b>100</b>	Arun Parashar	Assistant Professor	School of Pharmaceutical Sciences	2.4
<b>101</b>	Ashutosh Kumar Dash	Assistant Professor	Faculty of Pharmaceutical Sciences	2.7
<b>102</b>	Azhar Khan	Associate Professor	School of Biotechnology	8.11
<b>103</b>	Chetna Kumari	Assistant Professor	School of Pharmaceutical Sciences	3.1
<b>104</b>	Debajyoti Bose	Assistant Professor	School of Biotechnology	1
<b>105</b>	Deepak Kapoor	Dean / Principal / Director / Vice Chancellor	School of Pharmaceutical Sciences	6.7
<b>106</b>	Deepak Kumar	Associate Professor	School of Pharmaceutical Sciences	4.3
<b>107</b>	Deepika Dutta	Assistant Professor	School of Pharmaceutical Sciences	2.4
<b>108</b>	Devika Rana	Assistant Professor	Faculty of Pharmaceutical Sciences	6
<b>109</b>	Dhriti Verma	Assistant Professor	School of Pharmaceutical Sciences	2.4
<b>110</b>	Gaurav Gupta	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	10.7

<b>111</b>	Gaurav Sharma	Assistant Professor	School of Advanced Chemical Sciences	7
<b>112</b>	Gurjot Kaur	Associate Professor	School of Pharmaceutical Sciences	2.6
<b>113</b>	Hemlata Kaurav	Assistant Professor	School of Pharmaceutical Sciences	0
<b>114</b>	Kamal Dev	Professor	School of Biotechnology	11.9
<b>115</b>	Lalit Sharma	Assistant Professor	School of Pharmaceutical Sciences	4
<b>116</b>	Monika Prakash	Assistant Professor	School of Pharmaceutical Sciences	2.4
<b>117</b>	Navneet Upadhyay	Associate Professor	School of Pharmaceutical Sciences	10.5
<b>118</b>	Pardeep Singh	Professor	School of Advanced Chemical Sciences	3.8
<b>119</b>	Pooja Shandilya	Assistant Professor	School of Advanced Chemical Sciences	2.2
<b>120</b>	Poonam Negi	Associate Professor	School of Pharmaceutical Sciences	6.1
<b>121</b>	Prerna Bhardwaj	Assistant Professor	School of Biological & Environmental Sciences	4.1
<b>122</b>	Rakesh Kumar Shukla	Assistant Professor	School of Physics & Materials Science	8
<b>123</b>	Raveen Chauhan	Assistant Professor	School of Pharmaceutical Sciences	3.4
<b>124</b>	Rohit Goyal	Professor	School of Pharmaceutical Sciences	9.7
<b>125</b>	Rohit Sharma	Assistant Professor	School of Biotechnology	0.4
<b>126</b>	Saurabh Kulshreshta	Professor	School of Biotechnology	12

<b>127</b>	Sunil Kumar	Assistant Professor	School of Pharmaceutical Sciences	2.6
<b>128</b>	Swati Pundir	Assistant Professor	School of Pharmaceutical Sciences	8.11
<b>129</b>	Vivek Panwar	Assistant Professor	School of Pharmaceutical Sciences	0.7
<b>130</b>	Anita Chauhan	Assistant Professor	School of Legal Sciences	2.1
<b>131</b>	Anupriya Thakur	Assistant Professor	School of Legal Sciences	4.7
<b>132</b>	Chander Mohan Gupta	Assistant Professor	School of Legal Sciences	8.1
<b>133</b>	Monika Thakur	Assistant Professor	School of Legal Sciences	3.1
<b>134</b>	Nandan Sharma	Associate Dean	School of Legal Sciences	4.3
<b>135</b>	Narinder Gupta	Dean / Principal / Director / Vice Chancellor	School of Legal Sciences	3.6
<b>136</b>	Navreet Kaur Sahi	Associate Professor	School of Business Management and Liberal Arts	0.2
<b>137</b>	Renu Pal Sood	Associate Professor	School of Legal Sciences	0.5
<b>138</b>	Supriya Srivastava	Assistant Professor	School of Business Management and Liberal Arts	5.2
<b>139</b>	Swati Soni	Assistant Professor	School of Legal Sciences	1.1
<b>140</b>	Varsha Patil	Assistant Professor	School of Business Management and Liberal Arts	8.11
<b>141</b>	Amit Kumar	Assistant Professor	School of Agriculture	2.3
<b>142</b>	Santanu Mukherjee	Assistant Professor	School of Agriculture	0.11



<b>143</b>	Arshdeep Singh	Assistant Professor	School of Agriculture	0.7
<b>144</b>	Shweta Sharma	Assistant Professor	School of Agriculture	0.6
<b>145</b>	Pratima Rana	Assistant Professor	School of Agriculture	0.5
<b>146</b>	Sanchit Thakur	Assistant Professor	School of Agriculture	0.7
<b>147</b>	Samriti	Assistant Professor	School of Agriculture	0.1
<b>148</b>	Devanshi Pandit	Assistant Professor	School of Agriculture	1
<b>149</b>	Ratika Kayastha	Assistant Professor	School of Agriculture	0.1
<b>150</b>	Chavan Praful Devrao	Assistant Professor	School of Bioengineering and Food Technology	3
<b>151</b>	Juhi Saxena	Assistant Professor	School of Bioengineering and Food Technology	0.3
<b>152</b>	Anuradha Sourirajan	Professor	School of Biotechnology	11.3
<b>153</b>	Anupam Jyoti	Associate Professor	School of Biotechnology	0.3
<b>154</b>	Jyoti Mehta	Assistant Professor	School of Biotechnology	0.11
<b>155</b>	Gaurav Saxena	Assistant Professor	School of Biotechnology	0.9
<b>156</b>	Vipin Pubby	Dean / Principal / Director / Vice Chancellor	School of Business Management and Liberal Arts	4.4
<b>157</b>	Ranjna Thakur	Assistant Professor	School of Business Management and Liberal Arts	4
<b>158</b>	Indu Negi	Assistant Professor	School of Business Management and Liberal Arts	0.8

<b>159</b>	Pratip Mazumdar	Dean / Principal / Director / Vice Chancellor	School of Business Management and Liberal Arts	4.1
<b>160</b>	Mukesh Goswami	Dean / Principal / Director / Vice Chancellor	School of Business Management and Liberal Arts	0.1
<b>161</b>	Shubhika Sharma	Assistant Professor	School of Business Management and Liberal Arts	8.3
<b>162</b>	Ankit Shukla	Assistant Professor	School of Business Management and Liberal Arts	3.6
<b>163</b>	Nagendra Yadav	Assistant Professor	School of Business Management and Liberal Arts	2
<b>164</b>	Rajesh Williams	Assistant Professor	School of Business Management and Liberal Arts	0.2
<b>165</b>	Anupama Chandel	Assistant Professor	School of Business Management and Liberal Arts	3.6
<b>166</b>	Nishtha Singh	Assistant Professor	School of Business Management and Liberal Arts	0.1
<b>167</b>	Mamta Sharma	Associate Professor	School of Biological & Environmental Sciences	11.1
<b>168</b>	Amita Kumari	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	11.9
<b>169</b>	Ruhi Thakur	Assistant Professor	School of Biological & Environmental Sciences	1
<b>170</b>	Reshma Sinha	Assistant Professor	School of Biological & Environmental Sciences	0.9

<b>171</b>	Dipika Rana	Assistant Professor	School of Biological & Environmental Sciences	0.1
<b>172</b>	Ritesh Banerjee	Assistant Professor	School of Biological & Environmental Sciences	0.1
<b>173</b>	Mamta Shandilya	Assistant Professor	School of Physics & Materials Science	3.6
<b>174</b>	Pawan Kumar	Assistant Professor	School of Physics & Materials Science	3
<b>175</b>	Rohit Jasrotia	Assistant Professor	School of Physics & Materials Science	3.4
<b>176</b>	Pooja Dhiman	Assistant Professor	School of Physics & Materials Science	0.11
<b>177</b>	Nitika Devi	Assistant Professor	School of Physics & Materials Science	0.6
<b>178</b>	Neeraj Gandotra	Associate Professor	Yogananda School of AI, Computer and Data Sciences	11.1
<b>179</b>	Sunil Kumar	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	8.11
<b>180</b>	Sonia	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	1.2
<b>181</b>	Kushal Kanwar	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	1.3
<b>182</b>	Vipul Tomar	Assistant Professor	School of Business Management and Liberal Arts	2.3
<b>183</b>	Sunil Kumar Sharma	Assistant Professor	School of Advanced Chemical Sciences	1.11
<b>184</b>	Pinky Satija	Assistant Professor	School of Advanced Chemical Sciences	0.5
<b>185</b>	Jyoti Rani	Assistant Professor	School of Advanced Chemical Sciences	0.5
<b>186</b>	Praveen Kumar	Assistant Professor	School of Advanced Chemical Sciences	0.2

<b>187</b>	Ekta Bala	Assistant Professor	School of Advanced Chemical Sciences	1.7
<b>188</b>	Lata Negi	Assistant Professor	School of Business Management and Liberal Arts	3.5
<b>189</b>	Rahul Chandel	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	0.1
<b>190</b>	Shard	Assistant Professor	School of Business Management and Liberal Arts	11
<b>191</b>	Ankur Saxena	Assistant Professor	School of Business Management and Liberal Arts	1.2
<b>192</b>	Rohit Khosla	Other	School of Business Management and Liberal Arts	0.8
<b>193</b>	Ajay Khanna	Dean / Principal / Director / Vice Chancellor	School of Business Management and Liberal Arts	0.7
<b>194</b>	Poonam Nanda	Associate Professor	School of Business Management and Liberal Arts	8.4
<b>195</b>	Avnee Gupta	Associate Professor	School of Business Management and Liberal Arts	3.1
<b>196</b>	Payal Khanna	Assistant Professor	School of Business Management and Liberal Arts	0.6
<b>197</b>	Nishtha Shukla	Dean / Principal / Director / Vice Chancellor	School of Business Management and Liberal Arts	2.7
<b>198</b>	Sanjeev Singh	Dean / Principal / Director / Vice Chancellor	School of Business Management and Liberal Arts	0.5
<b>199</b>	Pawan Sharma	Assistant Professor	School of Business Management and Liberal Arts and	9.1

			Liberal Arts	
<b>200</b>	Suman	Assistant Professor	School of Biological & Environmental Sciences	14
<b>201</b>	Tejinder Pal Singh Gill	Professor	School of Business Management and Liberal Arts and Liberal Arts	5.1
<b>202</b>	Vikrant Chauhan	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	10.3
<b>203</b>	Vishal Anand	Dean / Principal / Director / Vice Chancellor	School of Biotechnology and Management Sciences	10.11
<b>204</b>	Het Ram Kashyap	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	6.3
<b>205</b>	Salena Janjua	Assistant Professor	School of Agriculture	2.3
<b>206</b>	Archna Sinhmar	Assistant Professor	Faculty of Applied Science and Biotechnology	2
<b>207</b>	Vineet Sharma	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	3
<b>208</b>	Kasahun Gudeta Gutema	Assistant Professor	Faculty of Basic Sciences	2.1
<b>209</b>	Tokuma Getahun	Assistant Professor	Faculty of Basic Sciences	2.1
<b>210</b>	Saroj Khosla	Professor	School of Business Management and Liberal Arts and Liberal Arts	11.1
<b>211</b>	Mohan Dutt Sharma	Professor	School of Business Management and	4.5

			Liberal Arts and Liberal Arts	
<b>212</b>	Sunil Mehta	Dean / Principal / Director / Vice Chancellor	School of Business Management and Liberal Arts and Liberal Arts	2
<b>213</b>	Devesh Kumar	Professor	School of Business Management and Liberal Arts and Liberal Arts	9.5
<b>214</b>	Vijay Kumar	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	4.1
<b>215</b>	Rajni Sharma	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	11.1
<b>216</b>	Ranjeet Singh	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	11.9
<b>217</b>	Shikhar Sharma	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	10.3
<b>218</b>	Shikha Sood	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	1.7
<b>219</b>	Neelam Dev Sharma	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	11.9
<b>220</b>	Jagdeep Sambey	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	1.6
<b>221</b>	Kulwant Singh Nagial	Assistant Professor	School of Mechanical, Civil & Electrical Engineering	0.6
<b>222</b>	Virender Singh	Assistant Professor	School of Business Management and Liberal Arts and	0.6

			Liberal Arts	
223	Neeraj Pizar	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	4.1
224	Ashoo Khosla	Associate Professor	School of Business Management and Liberal Arts and Liberal Arts	6.2
225	Diksha Sharma	Assistant Professor	Yogananda School of AI, Computer and Data Sciences	4.11
226	Raj Kumar	Associate Professor	School of Mechanical, Civil & Electrical Engineering	7.11
227	Pooja Devi	Assistant Professor	School of Business Management and Liberal Arts and Liberal Arts	1

## 2.8 Teachers with Ph.D

Sr. No.	Name of teacher	Qualification
1	Raj Kumar	Ph.D
2	Raj Kumar Saini	Ph.D
3	Ram Prakash Dwivedi	Ph.D
4	Robin Thakur	Ph.D
5	S S Chandel	Ph.D
6	Abhilash Pathania	Ph.D
7	Amar Raj Singh	Ph.D
8	Amit Kumar	Ph.D
9	Anil Kumar	Ph.D
10	Anirban Saha	Ph.D
11	Anuj Kumar Poonia	Ph.D
12	Arunava Poddar	Ph.D
13	Arvind Singh Bisht	Ph.D
14	Ashok K Pathera	Ph.D
15	Ashwani Sharma	Ph.D
16	Bhaskar Goel	Ph.D
17	Chandrika Attri	Ph.D

18	Dinesh Kumar	Ph.D
19	Dinesh Singh	Ph.D
20	GK Sharma	Ph.D
21	Gururaj Kudur Jayaprakash	Ph.D
22	J M Julka	Ph.D
23	Joydeep Das	Ph.D
24	Lobzang Stanzen	Ph.D
25	Manju Jaidka	Ph.D
26	Mansoor Ali	Ph.D
27	Mohindra Singh Thakur	Ph.D
28	Nagesh Kumar	Ph.D
29	Namita Gandotra	Ph.D
30	Navsal Kumar	Ph.D
31	Nitin Kumar Sharma	Ph.D
32	Pankaj Kumar Chauhan	Ph.D
33	Pankaj Raizada	Ph.D
34	Pankaj Vaidya	Ph.D
35	Parvani Sharma	Ph.D
36	Parveen Sihag	Ph.D
37	Prachi Agrawal	Ph.D
38	Pradeep Kumar	Ph.D
39	Prem Kumar Khosla	Ph.D
40	Purnima Bali	Ph.D
41	Rachna Verma	Ph.D
42	Radha	Ph.D
43	Rahul Thory	Ph.D
44	Rajesh Sharma	Ph.D
45	Ravinder Nath	Ph.D
46	Rupak Nagraik	Ph.D
47	Satish Kumar Gupta	Ph.D
48	Somesh Sharma	Ph.D
49	Sonali Khanduja Kalra	Ph.D
50	Subodh Saurabh Singh	Ph.D
51	Tej Nath Dhar	Ph.D
52	Vikas Kumar	Ph.D
53	Amar Rao	Ph.D
54	Ankita Verma	Ph.D
55	Anurag Kumar	Ph.D
56	Chandresh Kumari	Ph.D
57	Kamalkant Vashisth	Ph.D
58	Kesari Singh	Ph.D
59	Kuldeep Chand Rojhe	Ph.D
60	Mala Tripathi	Ph.D
61	Narinder Verma	Ph.D



62	Nisha Kapoor	Ph.D
63	Nitika Thakur	Ph.D
64	Nitin Gupta	Ph.D
65	Pooja Verma	Ph.D
66	Prachi Kapil	Ph.D
67	Rozy Dhanta	Ph.D
68	Sakshi Sundaram	Ph.D
69	Sandeep Singh	Ph.D
70	Shankaharoop Ghoshal	Ph.D
71	Sunil Puri	Ph.D
72	Vinay Negi	Ph.D
73	Y S Negi	Ph.D
74	Astha Tripathi	Ph.D
75	Gaurav Sharma	Ph.D
76	Aditi Sharma	Ph.D
77	Arun Parashar	Ph.D
78	Ashutosh Kumar Dash	Ph.D
79	Azhar Khan	Ph.D
80	Debajyoti Bose	Ph.D
81	Deepak Kapoor	Ph.D
82	Deepak Kumar	Ph.D
83	Gaurav Gupta	Ph.D
84	Gaurav Sharma	Ph.D
85	Gurjot Kaur	Ph.D
86	Hemlata Kaurav	Ph.D
87	Kamal Dev	Ph.D
88	Lalit Sharma	Ph.D
89	Navneet Upadhyay	Ph.D
90	Pardeep Singh	Ph.D
91	Pooja Shandilya	Ph.D
92	Poonam Negi	Ph.D
93	Prerna Bhardwaj	Ph.D
94	Rakesh Kumar Shukla	Ph.D
95	Rohit Goyal	Ph.D
96	Rohit Sharma	Ph.D
97	Saurabh Kulshreshtha	Ph.D
98	Swati Pundir	Ph.D
99	Anita Chauhan	Ph.D
100	Chander Mohan Gupta	Ph.D
101	Nandan Sharma	Ph.D
102	Narinder Gupta	Ph.D
103	Navreet Kaur Sahi	Ph.D
104	Renu Pal Sood	Ph.D
105	Supriya Srivastava	Ph.D

106	Amit Kumar	Ph.D
107	Santanu Mukherjee	Ph.D
108	Arshdeep Singh	Ph.D
109	Shweta Sharma	Ph.D
110	Pratima Rana	Ph.D
111	Sanchit Thakur	Ph.D
112	Samriti	Ph.D
113	Devanshi Pandit	Ph.D
114	Ratika Kayastha	Ph.D
115	Juhi Saxena	Ph.D
116	Anuradha Sourirajan	Ph.D
117	Anupam Jyoti	Ph.D
118	Jyoti Mehta	Ph.D
119	Gaurav Saxena	Ph.D
120	Ranjna Thakur	Ph.D
121	Mamta Sharma	Ph.D
122	Amita Kumari	Ph.D
123	Reshma Sinha	Ph.D
124	Dipika Rana	Ph.D
125	Ritesh Banerjee	Ph.D
126	Mamta Shandilya	Ph.D
127	Pawan Kumar	Ph.D
128	Rohit Jasrotia	Ph.D
129	Pooja Dhiman	Ph.D
130	Nitika Devi	Ph.D
131	Neeraj Gandotra	Ph.D
132	Sunil Kumar	Ph.D
133	Sonia	Ph.D
134	Sunil Kumar Sharma	Ph.D
135	Pinky Satija	Ph.D
136	Jyoti Rani	Ph.D
137	Praveen Kumar	Ph.D
138	Devesh Kumar	Ph.D
139	Raj Kumar	Ph.D

## 2.9 Awards, recognition, fellowships

Sr. No.	Name of teacher	Designation	Name of the award, fellowship	Name of the Awarding Agency
1	Pooja Shandilya	Assistant Professor	Women Researcher Award (International Scientist Awards on Engineering, Science	VDGOOD

			and Medicine)	
2	Amit Kumar	Assistant Professor	Young Scientist Award for outstanding contribution in the field of Entomology, International Web Conference on Global Research Initiatives for Sustainable Agriculture and Allied Sciences (GRISAAS-2020)	Astha Foundation
3	Mansoor Ali	Assistant Professor	Best Ph.D. Thesis Award 2021 for outstanding contribution and recognition in field of Soil Science	Agricultural and Environmental Technology Development Society (AETDS)
		Assistant Professor	Young Scientist Award for outstanding contribution in the field of Soil Science at International Web Conference on Innovative and Current Advances in Agriculture and Allied Sciences	Society for Scientific Development in Agriculture and Technology
4	Deepak Kumar	Associate Professor	Awarded as the Youngest Scientist in the field of Pharmaceutical Sciences	HREA Education Award 2020
		Associate Professor	Awarded Design Patent for "Ultrasound and Ultraviolet Combined Multicompartment Apparatus for Chemical Synthesis " by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
			Awarded Design Patent for "Real Time	The Office of the Controller

5	Brij Bhushan	Assistant Professor	Monitoring Device for Biological Macro-Molecules" by Controller General of Patents, Designs and Trade Marks	General of Patents, Designs and Trade Marks
8	Robin Thakur	Associate Professor	Awarded Design Patent for "Thermo-Photovoltaic System" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
		Associate Professor	Awarded Design Patent for "Agorot" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
		Associate Professor	Awarded Design Patent for "Tank Cleaner" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
9	Rupak Nagraik	Assistant Professor	Awarded Design Patent for "Polyhouse" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
		Assistant Professor	Awarded Design Patent for "Hand-Gripper Charger" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
10	Sorabh Aggarwal	Assistant Professor	Awarded Design Patent for "Mini Corn-Roaster" by Controller General of Patents,	The Office of the Controller General of Patents,

			Designs and Trade Marks	Designs and Trade Marks
11	Sushil Kumar	Assistant Professor	Awarded Design Patent for "Stone Collector" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
			Awarded Design Patent for "Foldable Helmet" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
			Awarded Design Patent for "Stove-cum-Boiler" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
			Awarded Design Patent for "Solar Tiller" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
			Awarded Design Patent for "Marker-cum- Eraser" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
			Awarded Design Patent for "Hot Plate Stirrer" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks

			Awarded Design Patent for "Eco-friendly Power Generator" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
			Awarded Design Patent for "Seed Gun" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
			Awarded Design Patent for "Human Powered Harvester cum Flour Mill" by Controller General of Patents, Designs and Trade Marks	The Office of the Controller General of Patents, Designs and Trade Marks
12	Dinesh Kumar	Professor	Research Excellence Award 2020 (InSc Awards 2020)	Institute of Scholars
13	Santanu Mukherjee	Assistant Professor	Hiyoshi Young Leaf Award for Outstanding Research in the field of Environmental Conservation and Protection in India	Hiyoshi Corporation

## 2.10 Evaluation Process and Reforms

Setting its standards high and aiming for a world-class system of evaluation and assessment, Shoolini University has considerably revamped its examination system, aligning it with the best practices in the world. The office of the Controller of Examination (COE) with its exclusive staff to moderate and regulate assessments and evaluation across all disciplines/ courses, works round the clock to ensure that the system works without glitches. The assessment and evaluation in each program have two major components: midterm examination and end-term examination.

The following are its distinctive features: is not an exaggeration to say that during the pandemic, Shoolini University stood out in its attempt to successfully conduct its annual examination and declared its results on time. This was possible only because of the strong IT-based assessment system that was already in place. Without losing

any time, the faculty underwent an intensive training and moved seamlessly to a completely online system of teaching and evaluation. 100% automation of entire division & implementation of Examination Management System (EMS).

## **2.11 Student Performance and Learning Outcomes**

University incorporates in curricula all Programme Outcomes (PO), Programme Specific Outcomes and Course Outcomes (CO) and display on own e-Learning portal called eUniv to provide access to all stakeholders. Course booklets with syllabi, learning outcomes, lecture schedules, references, and evaluation criteria, etc., too are posted on eUniv. The CO-PO attainment levels help in streamlining the outcomes.

University incorporates in curricula all Programme Outcomes (PO), Programme Specific Outcomes and Course Outcomes (CO) and display on own e-Learning portal called eUniv to provide access to all stakeholders. Course booklets with syllabi, learning outcomes, lecture schedules, references, and evaluation criteria, etc., too are posted on eUniv. The CO-PO attainment levels help in streamlining the outcomes.

Bloom's Taxonomy is used in defining the outcomes:

- Measurable and stated Learning outcomes describing knowledge, skills, and abilities are attained through a best-fit of resources and effective course delivery containing online ppt, case study, group discussions, breakout rooms, discussion forums, videos, live industry examples etc.
- Term exams, surprise tests, quizzes, assignments, practical, seminars, presentations, viva-voice, etc. specify the performance criteria to determine the extent to which the learning outcomes are achieved.
- Outcomes are also assessed by using direct and indirect Feedback Mechanism.

The learning outcomes show impressive pass percentage, excellent employment and selection in UPSC, HAS, NET, SLET, GATE, GRE, GPAT and Ph. D. and Post Docs from premier institutions.

## **2.12 Programme outcomes**

Multidisciplinary approach of designing, implementing and assessing Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) leads to critical and collective understanding of scientific, technological, societal and environmental issues in a global context.

The indirect attainment of COs and POs is computed with the help of:

- Feedback Mechanism is taken from various stakeholders such as regular and visiting teachers.

- Students' feedback is obtained through eUniv.
- Feedback from alumni, employer, employees, and parents is also obtained.

Internal and end term examinations, with different weights are employed as direct method. The internal component comprises continuous evaluation whereas end term examination is a time-bound written test. These criteria are pre-specified in the course booklets.

Deans constitute a committee to develop standards to determine whether students have achieved the desired goals. Data collected using direct and indirect measures is analysed to document and improve students' learning for their respective programmes. The results of outcomes drive further revision and redesigning of programme Learning outcomes are reflected through improved pass percentage and fewer dropouts. Many students get selected in competitive exams like UPSC, HAS, NET, SLET, GATE, GRE, GPAT etc. A few students get scholarships for Ph. D. and Post Docs from premier institutions.

### 2.13 Number of students passed

Sr. No.	Programme Name	No. of students appeared in final year examination	No. of students passed in final year examination
1.	B.Com (Hons.)	46	46
2.	B.Pharmacy	91	91
3.	B.Sc (Hons.) Biotechnology	52	52
4.	B.Sc (Hons.) Botany	12	12
5.	B.Sc (Hons.) Chemistry	9	9
6.	B.Sc (Hons.) Mathematics	10	10
7.	B.Sc (Hons.) Microbiology	23	23
8.	B.Sc (Hons.) Physics	10	10
9.	B.Sc (Hons.) Zoology	9	9
10.	B.Sc Hospitality and Hotel Administration	15	15
11.	B.Sc Yoga	15	15
12.	B.Sc. (Hons) Food Technology	4	4
13.	B.Tech Biotechnology	42	42
14.	B.Tech Civil Engineering	13	13
15.	B.Tech Civil Engineering (Lateral)	22	22
16.	B.Tech CSE	48	48
17.	B.Tech CSE (Lateral)	3	3
18.	B.Tech ECE	3	2



19.	B.Tech ECE (Lateral)	1	1
20.	B.Tech Food Technology	22	22
21.	B.Tech Food Technology (Lateral)	1	1
22.	B.Tech IT	3	3
23.	B.Tech IT (Lateral)	2	2
24.	B.Tech Mechanical Engineering	17	17
25.	B.Tech Mechanical Engineering (Lateral)	4	4
26.	BA (Hons) Economics	2	2
27.	BA (Hons) English	13	13
28.	BA Journalism and Mass Communication	11	11
29.	BBA	51	51
30.	LLB	4	4
31.	LLM	14	14
32.	M.Pharmacy Pharmaceutical Chemistry	14	14
33.	M.Pharmacy Pharmaceutics	11	10
34.	M.Pharmacy Pharmacology	10	10
35.	M.Sc Biotechnology	48	48
36.	M.Sc Botany	20	20
37.	M.Sc Chemistry	37	37
38.	M.Sc Environmental Sciences	10	10
39.	M.Sc Food Technology	30	30
40.	M.Sc Maths	17	17
41.	M.Sc Microbiology	25	25
42.	M.Sc Physics	16	16
43.	M.Sc Yoga	5	5
44.	M.Sc Zoology	34	34
45.	M.Tech Biotechnology	8	8
46.	M.Tech Civil	2	2
47.	M.Tech CSE	1	1
48.	M.Tech Food Technology	4	4
49.	M.Tech Mechanical	2	2
50.	MA English	3	3
51.	MBA	186	159
52.	Ph.D Biotechnology	8	8
53.	Ph.D Botany	6	6
54.	Ph.D Chemistry	8	8
55.	Ph.D ECE	1	1
56.	Ph.D Food Technology	2	2
57.	Ph.D Management Sciences	6	6
58.	Ph.D Maths	1	1
59.	Ph.D Mechanical	2	2

60.	Ph.D Microbiology	9	9
61.	Ph.D Pharmaceutical Sciences	3	3
62.	Ph.D Physics	3	3
63.	Ph.D Zoology	4	4
		<b>1108</b>	<b>1079</b>

## CHAPTER-III

### RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 Promotion of Research and Facilities

Shoolini University is located in the lap of a benign Himalayan ecosystem, the research agenda is focused on the economic and sustainable development of the Himalayan region. Shoolini University is committed to provide quality research infrastructure facilities at all times to the faculty members and research students. Till date best in class infrastructure facilities have been created in all disciplines and the same are being regularly upgraded. To keep up with the global research pace, Shoolini University has created several Research Centers and state of the art research infrastructure facilities are available with the centers Based on the upgradation requirements of various research centers and departments infrastructure grants have been provided every year. In addition to the infrastructure grants Shoolini University also provides start-up grants to the faculty members to initiate their own research. Shoolini University has been investing substantially to its Yogananda knowledge Center by subscribing to various research and support databases like EBSCO and DELNET to access research publications, SciVal for research data analysis. IBM-SPSS for statistical data analysis, URKUND for plagiarism to name a few.

#### a) Seed money for research (amount INR in Lakhs) : 51.16

Sr. No.	Name of the teacher provided with seed money	The amount of seed money
1	Abhilash Pathania Project Title: Portable vehicle washing equipment	₹ 75,000
2	Aditi Sharma Project Title: GC/MS Characterization, in-vitro Antioxidant, Anti-inflammatory and Antimicrobial Activity of Essential Oils from Pinus Plant Species from Himachal Pradesh, India	₹ 80,000
3	Amar Raj Singh Suri Project Title: Experimental investigation of heat transfer and fluid flow behaviour in multiple square perforated twisted tape with square wing inserts heat exchanger tube	₹ 75,000
4	Amit Kumar Project Title: 1) CeO <sub>2</sub> /g- C <sub>3</sub> N <sub>4</sub> /V <sub>2</sub> O <sub>5</sub> ternary nano hetero-structures decorated with CQDs for enhanced photo-reduction capabilities under different light sources: Dual Z-scheme mechanism 2) Carbon quantum dots and reduced graphene oxide modified self-assembled S@C <sub>3</sub> N <sub>4</sub> /B@C <sub>3</sub> N <sub>4</sub> metal-free nano-photocatalyst for high performance degradation of chloramphenicol	₹ 1,80,000

5	Amita Kumari Project Title: Phytochemicals analysis and antibacterial activity of leaf extracts of Populus ciliata wall. Ex Royle	₹ 85,000
6	Anuradha Sourirajan Project Title: 1) Phytocompounds of three medicinal plants (juniperus communis, urtica dioica and coleus forskohlii) of north west himalayas increases the potency of antibacterial and antifungal antibiotics 2) Saccharomyces cerevisiae ER membrane protein complex subunit 4 (EMC4) plays a crucial role in eIF2B-mediated translation regulation and survival under stress conditions	₹ 1,50,000
7	Ashok K. Pathera Project Title: Effect of vacuum tumbling and red beetroot juice incorporation on quality characteristics of marinated chicken breast and leg meats	₹ 75,000
8	Azhar Khan Project Title: Anti-obesity efficacy of the selected high altitude Himalayan herbs: in vitro studies	₹ 1,20,000
9	Bhaskar Goel Project Title: IDEAL MACHINING OF PMMA AND POLYCARBONATE OPTICAL LENS AND SPECTACLE GLASSES AND METHODS	₹ 70,000
10	Brijbhusham Sharma Project Title: lot-based intelligent irrigation system for paddy crop using an internet-controlled water pump	₹ 75,000
11	Debajyoti Bose Project Title: Aspects of Bioeconomy and Microbial Fuel Cell Technologies for Sustainable Development	₹ 95,000
12	Deepak Kumar Project Title: Synthesis, spectral analysis and in vitro cytotoxicity of diorganotin (IV) complexes derived from indole-3-butyric hydrazide	₹ 1,15,000
13	Deepak N. Kapoor Project Title: Long term delivery of glibenclamide from in situ forming microparticles for the treatment of ischemic stroke	₹ 1,25,000
14	Dinesh Kumar Project Title: Bioethanol production from apple pomace using co-cultures with saccharomyces cerevisiae in solid- state fermentation	₹ 1,00,000
15	Gaurav Gupta: Project Title: COVID-19: Automated Detection and Monitoring of Patients Worldwide Using Machine Learning	₹ 1,30,000

16	Gaurav Sharma Project Title: 1) Fe <sub>3</sub> O <sub>4</sub> /ZnO/Si <sub>3</sub> N <sub>4</sub> nanocomposite based photocatalyst for the degradation of dyes from aqueous solution 2) Adsorptive removal of noxious cadmium ions from aqueous medium using activated carbon/zirconium oxide composite: Isotherm and kinetic modelling	₹ 1,80,000
17	Gururaj Kudur Jayaprakash Project Title: Electrochemical and quantum chemical studies of cetylpyridinium bromide modified carbon electrode interface for sensor applications	₹ 78,000
18	Kamal Dev Project Title: 1) Bioassay guided fractionation of rhizome extract of Rheum emodi wall as bio-availability enhancer of antibiotics against bacterial and fungal pathogens 2) Molecular docking studies of phytocompounds of Rheum emodi Wall with proteins responsible for antibiotic resistance in bacterial and fungal pathogens: in silico approach to enhance the bio-availability of antibiotics	₹ 1,70,000
19	Lalit Sharma Project Title: Pinus Roxburghii Sarg. Ameliorates alzheimer's disease-type neurodegeneration and cognitive deficits caused by intracerebroventricular- streptozotocin in rats: An in vitro and in vivo study	₹ 1,20,000
20	Mamta Shandilya Project Title: Magnetic amendment in the fabrication of environment friendly and biodegradable iron oxide/ethyl cellulose nanocomposite membrane via electrospinning	₹ 90,000
21	Mamta Sharma Project Title: Unveiling antimicrobial and anticancerous behavior of AuNPs and AgNPs moderated by rhizome extracts of Curcuma longa from diverse altitudes of Himalaya	₹ 1,40,000
22	Navneet K. Upadhyay Project Title: Novel RP-HPLC method development and validation for the simultaneous estimation of saxagliptin and glimepiride	₹ 75,000
23	Neeraj Gandotra Project Title: Prediction of heat transfer and pressure drop in helically perforated twisted tape heat exchanger tube using fuzzy logic	₹ 70,000
24	P. K. Chauhan Project Title: Small-scale phyco- mitigation of raw urban wastewater integrated with biodiesel production and its utilization for aquaculture	₹ 90,000

25	Pankaj Raizada Project Title: 1) Visible light assisted photodegradation of 2,4- dinitrophenol using Ag <sub>2</sub> CO <sub>3</sub> loaded phosphorus and sulphur co- doped graphitic carbon nitride nanosheets in simulated wastewater 2) Construction of carbon nanotube mediated Fe doped graphitic carbon nitride and Ag <sub>3</sub> VO <sub>4</sub> based Z-scheme heterojunction for H <sub>2</sub> O <sub>2</sub> assisted 2,4 dimethyl phenol photodegradation	₹ 1,80,000
26	Pankaj vaidya Project Title: 1) Block chain technology based a secure solar energy management and trading system	₹ 65,000
27	Pradeep Kumar Project Title: Hyper-production of taxol from <i>Aspergillus fumigatus</i> , an endophytic fungus isolated from <i>Taxus</i> sp. of the Northern Himalayan region	₹ 90,000
28	Pardeep Singh Project Title: 1) Use of chicken feather and eggshell to synthesize a novel magnetized activated carbon for sorption of heavy metal ions 2) Magnetically separable ZnO/ZnFe <sub>2</sub> O <sub>4</sub> and ZnO/CoFe <sub>2</sub> O <sub>4</sub> photocatalysts supported onto nitrogen doped graphene for photocatalytic degradation of toxic dyes	₹ 1,50,000
29	Pooja Dhiman Project Title: Mg <sub>0.5</sub> Ni <sub>x</sub> Zn <sub>0.5-x</sub> Fe <sub>2</sub> O <sub>4</sub> spinel as a sustainable magnetic nano-photocatalyst with dopant driven band shifting and reduced recombination for visible and solar degradation of Reactive Blue-19	₹ 95,000
30	Pooja Shandilya Project Title: Synthesis of Eu <sup>3+</sup> -doped ZnO/Bi <sub>2</sub> O <sub>3</sub> heterojunction photocatalyst on graphene oxide sheets for visible light-assisted degradation of 2,4- dimethyl phenol and bacteria killing	₹ 98,000
31	Poonam Negi Project Title: 1) Novel Tragacanth Gum-Entrapped lecithin nanogels for anticancer drug delivery 2) Novel thymoquinone loaded chitosan-lecithin micelles for effective wound healing: Development, characterization, and preclinical evaluation	₹ 1,60,000
32	Rachna Verma Project Title: Mycorrhizal inoculation impact on <i>Acorus calamus</i> L. - An ethnomedicinal plant of western Himalaya and its in silico studies for anti-	₹ 1,10,000

	inflammatory potential	
33	RadhaProject Title: 1) Evaluation of nutritional, phytochemical, and mineral composition of selected medicinal plants for therapeutic uses from cold desert of western himalaya 2) Documentation of commonly used ethnoveterinary medicines from wild plants of the high mountains in shimla district, himachal pradesh, india	₹ 1,20,000
34	Raj Kumar Saini Project Title: Performance improvement of three-phase squirrel cage induction motor operating under rated voltages	₹ 85,000
35	Raj Kumar Project Title: Experimental investigation and performance evaluation of a novel solar dryer integrated with a combination of SHS and PCM for drying chilli in the Himalayan region	₹ 90,000
36	Rajesh Kumar Project Title: 1) Structural and optical properties of copper oxide nanoparticles: A study of variation in structure and antibiotic activity 2) Empirical model for the estimation of global solar radiation for Indian locations	₹ 1,50,000
37	Ram Prakash Dwivedi Project Title: 1) An ultra-compact plasmonic Modulator/Switch using VO <sub>2</sub> and elasto-optic effect 2) An Ultra-compact Plasmonic Modulator Using Elasto-optic Effect and Resonance Phenomena	₹ 1,25,000
38	Reshma SinhaProject Title: Protective effect of emblica officinalis in cyprinus carpio against hepatotoxicity induced by malachite green: Ultrastructural and molecular analysis	₹ 95,000
39	Robin Thakur Project Title: Prediction of heat transfer and pressure drop in helically perforated twisted tape heat exchanger tube using fuzzy logic	₹ 85,000
40	Rohit Goyal Project Title: Long-term exposure to constant light induces dementia, oxidative stress and promotes aggregation of sub-pathological A $\beta$ 42 in Wistar rats	₹ 1,50,000
41	Rupak Nagraik Project Title: 1) Nanofabricated versatile electrochemical sensor for Leptospira interrogans detection 2) PCR based genetic marker for the detection of Leptospira interrogans causing leptospirosis	₹ 1,70,000

42	S. S. Chandel Project Title: 1) Performance analysis of a 10 MWp utility scale grid-connected canal-top photovoltaic power plant under Indian climatic conditions 2) A new integrated single-diode solar cell model for photovoltaic power prediction with experimental validation under real outdoor conditions	₹ 1,60,000
43	Saurabh Kulshrestha Project Title: 1) Bioaugmentation of membrane bioreactor with Aeromonas hydrophila LZ-MG14 for enhanced malachite green and hexavalent chromium removal in textile wastewater 2) A moringa oleifera seeds-based filter for efficient removal of congo red from aqueous medium	₹ 1,65,000
44	Somesh Sharma Project Title: Effect of alginate- microencapsulated hydrogels on the survival of lactobacillus rhamnosus under simulated gastrointestinal conditions	₹ 1,25,000
45	Sunil Kumar Project Title: Prediction of heat transfer and pressure drop in helically perforated twisted tape heat exchanger tube using fuzzy logic	₹ 85,000

**b) Teachers receiving national/ international fellowship**

Sr. No.	Name of the teacher	Name of the fellowships	Awarding Agency
1	Dr. Joydeep Das	Received financial support for research Project Title: Deriving Methyl Furans from Himalayan Biomass as Sustainable Alternative to Petroleum Products Amount received: Rs 2.61 Lakhs	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)
2	Dr. Rajesh Sharma	Received financial support for research Project Title: Efficiency improvement of packed bed solar thermal energy storage using different fin shapes on absorber plate in solar air collector Amount received: Rs 3.04 Lakhs	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)



3	Dr. Pankaj Raizada	Received financial support for research Project Title: Fabrication of graphitic carbon nitride based magnetic absorbent and photocatalyst for water soluble industrial effluents treatment Amount received: Rs 3.04 Lakhs	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)
4	Dr. Nitika Thakur	Received financial support for research Project Title: Technological Innovation for Standardization of On-farm Input Generation from Locally Available Resources for Upgrading the Rural Villagers of Himachal Pradesh Amount received: Rs 2.56 Lakhs	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)
5	Dr. Saurabh Kulshrestha	Received financial support for research Project Title: Towards the development of a better, safe, environment friendly filter using Moringa oleifera for treatment of industrial waste water of Himachal Pradesh Amount received: Rs 2.64 Lakhs	Department of Environment, Science and Technology
6	Dr. Deepak N. Kapoor	Received financial support for research Project Title: Characterization of licensed biomedical products including hypochlorous acid, ointments for frost bite to enhance shelf life Amount received: Rs 0.84 Lakhs	Institute of Nuclear Medicine and Allied Sciences (INMAS)
7	Dr. Joydeep Das	Received financial support for research Project Title: Carbon dots mediated imaging guided and targeted co-delivery of small anticancer molecules and siRNA for synergistic breast cancer treatment Amount received: Rs 4 Lakhs	Science and Engineering Research Board
		Received financial support for research Project Title: Getting insight into gut	National Mission on

8	Dr. Saurabh Kulshrestha	microflora of tribal population of Himachal Pradesh for probiotic use and the production of natural antimicrobial substance Amount received: Rs 10.94 Lakhs	Himalayan Studies
9	Dr. Shankharoop Ghosal	Received financial support for research Project Title: Returning Taxus to the Forests and the People: a study in Shimla and Kullu Districts of the Indian Himalayan Region Amount received: Rs 0.74 Lakhs	National Mission on Himalayan Studies
10	Dr. Dinesh Kumar	Received financial support for research Project Title: Food Testing Research Amount received: Rs 13.67 Lakhs	Ministry of Food Processing Industry, New Delhi
11	Dr. Gurjot Kaur	Received financial support for research Project Title: Assessment of phytochemicals present in Indian indigenous plants through in silico methods for Covid19 targeting and treatment Amount received: Rs 1.11 Lakhs	The COVID-19 High Performance Computing Consortium

**c) Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows: 6**

Sl. No	Name of Research fellow	Duration of fellowship	Type of the fellowship	Granting agency
1	Swati	2 Years	Project Associate	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)
2	Rohit Kumar	2 Years	Project Associate	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)
3	Minakshi Sharma	3 Years	Research Associate	National Mission on Himalayan Studies

4	Arohi Dixit	2 Years	Research Associate	Lancaster University
5	Rajiv Kumar Rana	2 Years	Junior Research Fellow	Lancaster University
6	Himanshu Pandey	2 Years	Junior Research Fellow	Lancaster University

**d) Recognitions by National and International agencies**

<b>Sr. No</b>	<b>Name of the Scheme</b>	<b>Name of the Investigator</b>	<b>Name of the Funding agency</b>	<b>Funds provided (INR in lakhs)</b>	<b>Duration of the project</b>
1	Skill Vigyan Program	Dr. Saurabh Kulshrestha	Himachal Pradesh Council for Science Technology and Environment	20.60	2019-2021
2	Skill Development for Science internship programme-INSPIRE	Dr. Sunil Puri, Mr. Narender Verma	Department of Science and Technology	1.43	2010 to present

### 3.2 Resource Mobilization for Research

#### a) Extramural funding for Research

Name of the Investigator	Name of the Funding agency	Type	Funds provided (INR in lakhs)	Duration of the project
Dr. Gurjot Kaur	The COVID-19 High Performance Computing Consortium	Non-Government	1.11	2020-21

#### b) Grants for research projects sponsored by the government

Name of the Scheme	Name of the Investigator	Name of the Funding agency	Type	Funds provided (INR in lakhs)	Duration of the project
Deriving Methyl Furans from Himalayan Biomass as Sustainable Alternative to Petroleum Products	Dr. Joydeep Das	Himachal Pradesh Council for Science Technology and Environment	Government	2.61	2018-20
Efficiency improvement of packed bed solar thermal energy storage using different fin shapes on absorber plate in solar air collector	Dr. Rajesh Sharma	Himachal Pradesh Council for Science Technology and Environment (HIMCO STE)	Government	3.04	2019-21
Fabrication of graphitic carbon nitride based magnetic absorbent and photocatalyst for water soluble industrial effluents treatment	Dr. Pankaj Raizada	Himachal Pradesh Council for Science Technology and Environment (HIMCO STE)	Government	3.04	2019-21

Technological Innovation for Standardization of On-farm Input Generation from Locally Available Resources for Upgrading the Rural Villagers of Himachal Pradesh	Dr. Nitika Thakur	Himachal Pradesh Council for Science Technology and Environment (HIMCO STE)	Government	2.56	2018-20
Towards the development of a better, safe, environment friendly filter using Moringa oleifera for treatment of industrial waste water of Himachal Pradesh	Dr. Saurabh Kulshrestha	Department of Environment, Science and Technology	Government	2.64	2020-22
Characterization of licensed biomedical products including hypochlorous acid, ointments for frost bite to enhance shelf life	Dr. Deepak N. Kapoor	Institute of Nuclear Medicine and Allied Sciences (INMAS)	Government	0.84	2018-20
Carbon dots mediated imaging guided and targeted co-delivery of small anticancer molecules and siRNA for synergistic breast cancer treatment	Dr. Joydeep Das	Science and Engineering Research Board	Government	4.00	2019-21

Getting insight into gut microflora of tribal population of Himachal Pradesh for probiotic use and the production of natural antimicrobial substance	Dr. Saurabh Kulshrestha	National Mission on Himalayan Studies	Government	10.94	2019-21
Returning Taxus to the Forests and the People: a study in Shimla and Kullu Districts of the Indian Himalayan Region	Dr. Shankarop Ghosal	National Mission on Himalayan Studies	Government	0.74	2019-21

### c) Research projects

Name of the Scheme	Name of the Investigator	Name of the Funding agency	Type	Funds provided (INR in lakhs)	Duration of the project
Deriving Methyl Furans from Himalayan Biomass as Sustainable Alternative to Petroleum Products	Dr. Joydeep Das	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)	Government	2.61	2018-2020
Efficiency improvement of packed bed solar thermal energy storage using different fin shapes on absorber plate in solar air collector	Dr. Rajesh Sharma	Himachal Pradesh Council for Science Technology and Environment	Government	3.04	2019-2021

		(HIMCOSTE )			
Fabrication of graphitic carbon nitride based magnetic absorbent and photocatalyst for water soluble industrial effluents treatment	Dr. Pankaj Raizada	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)	Government	3.04	2019-2021
Technological Innovation for Standardization of On-farm Input Generation from Locally Available Resources for Upgrading the Rural Villagers of Himachal Pradesh	Dr. Nitika Thakur	Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)	Government	2.56	2018-2020
Towards the development of a better, safe, environment friendly filter using Moringa oleifera for treatment of industrial waste water of Himachal Pradesh	Dr. Saurabh Kulshrestha	Department of Environment, Science and Technology	Government	2.64	2020-2022
Characterization of licensed biomedical products including hypochlorous acid, ointments for frost bite to enhance shelf life	Dr. Deepak N. Kapoor	Institute of Nuclear Medicine and Allied Sciences (IN MAS)	Government	0.84	2018-2020
Carbon dots mediated imaging guided and targeted co-delivery of small anticancer molecules and siRNA for synergistic breast cancer treatment	Dr. Joydeep Das	Science and Engineering Research Board	Government	4.00	2019-2021

Getting insight into gut microflora of tribal population of Himachal Pradesh for probiotic use and the production of natural antimicrobial substance	Dr. Saurabh Kulshrestha	National Mission on Himalayan Studies	Government	10.94	2019-2021
Returning Taxus to the Forests and the People: a study in Shimla and Kullu Districts of the Indian Himalayan Region	Dr. Shankharoop Ghosal	National Mission on Himalayan Studies	Government	0.74	2019-2021
Assessment of phytochemicals present in Indian indigenous plants through in silico methods for Covid19 targeting and treatment	Dr. Gurjot Kaur	The COVID-19 High Performance Computing Consortium	Non-Government	1.11	2020-2021

### 3.3 Innovation Ecosystem

University has been awarded Excellent Band among all private universities in India, with a well-established IIC it has more than 200 budding innovators. Shoolini also has an established entrepreneurship club called "Samarthya", and an innovation-cum-incubation center called "Steve Jobs Incubation Centre" which has successfully launched Aaddoo Softech Private Limited. IPR cell of Shoolini university is recognized among the highest patent filer with 1150 filed patents out of which 494 are published and 2 granted. An Innovative Technology Business Incubation Centre (BI) No.108 for the state of Himachal Pradesh has been established at Shoolini University, approved by the Ministry of Micro, Small and Medium Enterprises (MSME), Govt. of India, on Jan 5, 2020. In addition, the students of Shoolini University also participate in various startup competitions, winning incubation awards on different platforms. Two of our scholars Amanpreet Laur Virk and Aliya Ali received an award of 10 Lacs for presentation of use of moringa seeds to purify water through the use of small and inexpensive kits similar to tea bags in INDIA INNOVATION GROWTH PROGRAM 2.0.

#### a) Workshops/seminars conducted

Sr. No.	Year	Name of the workshop/ seminar	Number of Participants	Date From – To	Date of establishment of IPR cell
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1	2020-21	Expert Talk on Preamble: The Moorings of the Indian Constitution	125	12 May 2020	04-Jul-14
2	2020-21	Expert Talk on Right to Information (RTI)	130	18 May 2020	04-Jul-14
3	2020-21	A virtual seminar on "Role of Indian Pharmaceutical Industry in Facilitating Global Access to Safe, Effective, Quality and Affordable Generic Medicines"	450	25 September 2020	04-Jul-14
4	2020-21	COLLOQUIUM ON FUNDAMENTAL DUTIES	75	31 October 2020	04-Jul-14
5	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Presentation Skills & Pre - Placement for B. Tech 7th Semester	197	26 November 2020	04-Jul-14
6	2020-21	GENDER STUDIES AND WOMEN EMPOWERMENT	80	26 November 2020	04-Jul-14
7	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Confidence Building for UG 1st Semester All across Students	795	08 December 2020	04-Jul-14
8	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) for B. Tech 1st Semester Students	347	09 December 2020	04-Jul-14
9	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) for B. Sc 1st Semester Students	211	10 December 2020	04-Jul-14
10	2020-21	Expert Talk on Indian Foreign Services and Role of Diplomacy in strengthening foreign relations	125	11 December 2020	04-Jul-14
11	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) for UG FMSLA 1st Semester Students	282	11 December 2020	04-Jul-14

12	2020-21	Webinar on Nutraceuticals and Functional foods: Role in Healthy ageing	151	30 December 2020	04-Jul-14
13	2020-21	Prospects of vegetables grafting in India	94	14 April 2021	04-Jul-14
14	2020-21	Prospects of vegetables grafting in India	94	14 April 2021	04-Jul-14
15	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Communication Skills for B. Tech 4th Semester Students	275	29 April 2021	04-Jul-14
16	2020-21	Webinar on Environment Day: Ecosystem Services	80	05 June 2021	04-Jul-14
17	2020-21	Demystifying Waterproofing	48	06 September 2021	05-Jul-14
18	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Selling Skills for MBA Quad 3 Students	135	01 February to 03 February 2021	04-Jul-14
19	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Pre- Placement for MBA Quad 7th Students	191	08 February to 12 February 2021	04-Jul-14
20	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Communication Skills for B. Sc 4th Semester Students	186	30 April 2021	04-Jul-14
21	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Pre- Placement for B. Tech 8th Semester students	197	01 March to 05 March 2021	04-Jul-14
22	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) for MBA Quad 6 Students on Leadership Skills	189	09 November to 11 November 2020	04-Jul-14

23	2020-21	Insights into Research	200	11 March 2021 to 12 March 2021	04-Jul-14
24	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Pre- Placement for M. Sc 2nd& 4th Semester Students	224	15 March to 17 March 2021	04-Jul-14
25	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Induction for MBA 1(Quad 1) Students	101	17 August to 20 August 2020	04-Jul-14
26	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Self Awareness for B.Tech 2nd Semester Students	291	17 May to 18 May 2021	04-Jul-14
27	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Transformation for MBA Quad 2 Students	136	17 November to 19 November 2020	04-Jul-14
28	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Self Development for All across 3rd Semester Students	612	17 September to 18 September 2020	04-Jul-14
29	2020-21	Knowledge Sharing Session on Human Trafficking	122	18 August to 21 August 2020	04-Jul-14
30	2020-21	AutoCAD for all	51	18 January to 22 January 2021	08-Jul-14
31	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Interview Skills for B. Sc 6th Semester Students	179	19 April to 20 April 2021	04-Jul-14
32	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Self Awareness for BSc 2nd Semester Students	225	19 May to 20 May 2021	04-Jul-14

33	2020-21	World Antimicrobial Awareness Week (WAAW): International webinar on Antimicrobial Resistance: Current Perspectives and Future Challenges	200	19 November to 20 November 2020	04-Jul-14
34	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Writing Skills for B. Tech 6th Semester Students	218	21 April to 22 April 2021	04-Jul-14
35	2020-21	Everyday Civil Engineering for You	32	22 February to 23 February 2021	07-Jul-14
36	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Interview Skills for UG- FMSLA 6th Semester Students	134	23 April to 24 April 2021	04-Jul-14
37	2020-21	Regulatory framework on bioresources and their conservation	60	23 December 2021	04-Jul-14
38	2020-21	Vehicle Maintenance to the drivers of Shoolini University	15	23 July to 30 July 2021	06-Jul-14
39	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Business Plan for MBA Quad 5 Students	191	24 August to 26 August 2020	04-Jul-14
40	2020-21	One-week condensed training on "HPLC, GCMS/MS, ICP-OES and Microwave Reaction systems"	70	24 December to 28 December 2020	04-Jul-14
41	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Self Awareness for UG FMSLA 2nd Semester Students	254	24 May to 25 May 2021	04-Jul-14
42	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Pre- Placement for M. Sc	213	24 November to 25 November	04-Jul-14

		1st& 3rd Semester Students		2020	
43	2020-21	A virtual conference on "Confluence of Biomedical and Allied Sciences for Development of Pharmaceuticals"	400	25 November to 27 November-2020	04-Jul-14
44	2020-21	Knowledge Sharing Session on Cyber Crimes	125	28 August to 1 September 2020	04-Jul-14
45	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Self Development for All across 5th Semester Students	525	28 September to 29 September 2020	04-Jul-14
46	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Communication Skills for UG FMSLA 4th Semester Students	170	3 May to 4 May 2021	04-Jul-14
47	2020-21	Knowledge Sharing Session on Anti Defection Laws	120	31 July to 4 August 2020	04-Jul-14
48	2020-21	Skill Progression through Rapid Intensive and Innovative Training (SPRINT) on Internship for MBA Quad 4th Semester Students	134	5 May to 7 May 2021	04-Jul-14
49	2020-21	Webinar on Environment Day: Ecosystem Services	80	05 June 2021	04-Jul-14
50	2020-21	Knowledge Sharing Session on Patent Laws and Practice	125	7 August to 11 August 2020	04-Jul-14
51	2020-21	Workshop on "Role of pharmacist in transforming global health"	436	25th September 2020	04-Jul-14

**b) Awards/recognitions received for research/innovations**

<b>Sr. No.</b>	<b>Title of the innovation</b>	<b>Name of the Awardee</b>	<b>Name of the Awarding Agency</b>
<b>1</b>	Research in the subject area of pharmaceutical chemistry Title of award/ recognition: Young scientist award	Deepak Kumar	Human rights education association, Vadodara, Gujarat
<b>2</b>	Research in the subject area of pharmaceutical chemistry Title of award/ recognition: Membership of American chemical society	Deepak Kumar	American chemical society, Washington, United States
<b>3</b>	PlcA-Based Nanofabricated Electrochemical DNA Biosensor for the Detection of Listeria Monocytogenes in Raw Milk Samples Title of award/ recognition: Research excellence award	Dinesh Kumar	Institute of Scholars, Bengaluru
<b>4</b>	Research in the subject area of chemistry Title of award/ recognition: Recognized as the World's Top 2% Scientists 2020	Gaurav Sharma	Elsevier, Amsterdam, Netherlands
<b>5</b>	Research in the subject area of chemistry Title of award/ recognition: Recognized as the World's Top 2% Scientists 2020	Amit Kumar	Elsevier, Amsterdam, Netherlands
<b>6</b>	Research in the subject area of chemistry Title of award/ recognition: Recognized as the World's Top 2% Scientists 2020	Pardeep Kumar	Elsevier, Amsterdam, Netherlands
<b>7</b>	Research in the subject area of energy Title of award/ recognition: Recognized as the World's Top 2% Scientists 2020	Shyam Singh Chandel	Elsevier, Amsterdam, Netherlands
<b>8</b>	Research in the subject area of chemistry Title of award/ recognition: Recognized as the World's Top 2% Scientists 2020	Pankaj Raizada	Elsevier, Amsterdam, Netherlands
<b>9</b>	Research in the subject area of chemistry Title of award/ recognition: Recognized as the World's Top 2% Scientists 2020	Joydeep Das	Elsevier, Amsterdam, Netherlands

#### 1.4 Research Publications and Awards

Sr. No.	Name of teacher	Designation	Name of the award, fellowship	Name of the Awarding Agency
1	Deepak Kumar	Associate Professor	Young scientist award	Human rights education association, Vadodara, Gujarat
2	Dinesh Kumar	Professor	Research excellence award	Institute of Scholars, Bengaluru
3	Gaurav Sharma	Associate Professor	Recognized as the World's Top 2% Scientists 2020	Elsevier, Amsterdam, Netherlands
4	Amit Kumar	Associate Professor	Recognized as the World's Top 2% Scientists 2020	Elsevier, Amsterdam, Netherlands
5	Pardeep Kumar	Professor	Recognized as the World's Top 2% Scientists 2020	Elsevier, Amsterdam, Netherlands
6	Shyam Singh Chandel	Professor	Recognized as the World's Top 2% Scientists 2020	Elsevier, Amsterdam, Netherlands
7	Pankaj Raizada	Associate Professor	Recognized as the World's Top 2% Scientists 2020	Elsevier, Amsterdam, Netherlands
8	Joydeep Das	Assistant Professor	Recognized as the World's Top 2% Scientists 2020	Elsevier, Amsterdam, Netherlands
9	Rajesh Sharma	Professor	Awarded research grant from Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)	Himachal Pradesh Council for Science Technology and Environment (HIMCOS TE)
10	Nitika Thakur	Assistant Professor	Awarded research grant from Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE)	Himachal Pradesh Council for Science Technology and Environment (HIMCOS TE)

11	Deepak N. Kapoor	Professor	Awarded research grant from Institute of Nuclear Medicine and Allied Sciences (IN MAS)	Institute of Nuclear Medicine and Allied Sciences (I NMAS)
12	Saurabh Kulshrestha	Professor	Awarded research grant from National Mission on Himalayan Studies	National Mission on Himalayan Studies
13	Gurjot Kaur	Associate Professor	Awarded research grant from The COVID-19 High Performance Computing Consortium	The COVID-19 High Performance Computing Consortium
14	Ashwani Sharma	Assistant Professor	Awarded design patent for THERMO-PHOTOVOLT AIC SYSTEM	Controller General of Patents, Designs and Trademarks
15	Robin Thakur	Associate Professor	Awarded design patent for Agrobot	Controller General of Patents, Designs and Trademarks
16	Brij Bhushan	Assistant Professor	Awarded design patent for a portable and cost-effective device for real time monitoring of biological macro molecules	Controller General of Patents, Designs and Trademarks
17	Amar Raj Singh Suri	Associate Professor	Awarded design patent for Stove- Cum-Boiler	Controller General of Patents, Designs and Trademarks
18	Raj Kumar	Associate Professor	Awarded design patent for Hand- Gripper Charger	Controller General of Patents, Designs and Trademarks
19	Rupak Nagraik	Assistant Professor	Awarded design patent for Hot Plate Stirrer	Controller General of Patents, Designs and Trademarks
20	Sushil Kumar	Assistant Professor	Awarded design patent for MINI CORN- ROASTER	Controller General of Patents, Designs and Trademarks



### 3.5 Patents published/awarded

Sr. No.	Name of the Patenter	Patent Number	Title of the patent	Year of Award of patent
1	Deepak Pathania, Rishu Katwal, Gaurav Sharma	359716	Nanocomposite for antimicrobial treatment of drinking water.	26 February 2021
2	Arvind Singhy, Robin Thakur, Anil Kumar, Sunil Kumar, Ashwani Sharma	312788	THERMO-PHOTOVOLTAIC SYSTEM	16 June 2021
3	Deepak Kumar, Ashutosh Kumar Dash, Deepak Kapoor	318731	Apparatus for Chemical Synthesis	26 August 2020
4	Kartik Chauhan, Rupak Nagraik	321874	POLYHOUSE	20 April 2021
5	Sushil Kumar, Robin Thakur, Rohit Sharma, Deepak Hetta, Rohit, Balraj, Neeraj	325038	Foldable Helmet	05 July 2021
6	Robin Thakur	326441	Agrobot	18 January 2021
7	Brij Bhushan, Shagun Gupta, R upak Nagraik, Ishan Sharma, Sudarshan	327424	A portable and cost-effective device for real time monitoring of biological macro molecules	26 October 2020
8	Sushil Kumar, Amar Raj Singh Suri	327644	Stove-Cum-Boiler	08 October 2020
9	Sushil Kumar, Praveen Kumar, Nikhil Sharma, Rohit, Shubham Prakash, Satyam Singh	327715	Solar Tiller	09 December 2020
	Sushil Kumar, Akarsh	328651-	STONE COLLECTOR	01 October

10	Sharma	001		2020
11	Sushil Kumar, Raj Kumar, Shubham Prakash, Akarsh Sharma	328652-001	Marker-cum-Eraser	27 November 2020
12	Sushil Kumar, Raj Kumar, Akarsh Sharma, Shubham Prakash	328660	Hand-Gripper Charger	26 October 2020
13	Kartik Chauhan, Shagun Gupta, Rupak Nagraik, Ananya Baruah, Ishan Sharma	328659	Hot Plate Stirrer	04 January 2021
14	Sushil Kumar, Akarsh Sharma, Shubham Prakash	334151-001	MINI CORN- ROASTER	12 April 2021
15	Pankaj Raizada, Anita Sudhaik, Pardeep Singh	201811033393	A METHOD FOR FABRICATION OF DIRECT Z-SCHEME PHOTOCATALYST FOR WATER PURIFICATION	August 14, 2020
16	Pardeep Singh, Adesh Saini, Pankaj Raizada, Anita Sudhaik, Rajesh Sharma	201811033394	A System Of CONVERTING BIOI INTO MAGNETIC PHOTOCATALYST FOR WASTEWATER TREATMENT	August 14, 2020
17	Avinash, Pankaj Kumar Chauhan, Rupak Nagraik, Somesh Sharma	201811046522	ANTIMICROBIAL EFFICACY AND SYNTHESIS OF BIOGENIC ZINC OXIDE NANOPARTICLES USING A PLANT EXTRACT OF WILD HIMALAYAN FICUS PALMATA	August 21, 2020
18	Dr. Mamta Shandilya, Dr. Shweta Thakur, Dr. Radheshyam Rai, Dr. Rajesh Kumar	201811035173	Dielectric relaxation in BaMgTiO3 material	August 14, 2020

			synthesized by hydrothermal method	
19	Anil Kumar, Sunil Kumar, Robin Thakur, Nitin Kumar, Amar Raj Singh Suri, Raj Kumar	201811035171	IMPINGEMENT JETS SOLAR AIR HEATING SYSTEM AND METHODS THEREOF	August 14, 2020
20	Dr. Rajesh Kumar, Mr Ritesh Verma, Mr Humesh Thakur	201811035172	PROTOTYPE OF NATURAL MODE INDIRECT SOLAR DRYER FOR DRYING OF GINGER (ZINGIBER OFFICINALE) IN HIMALAYAN REGION	August 14, 2020
21	Dr. Rajesh Kumar, Er Sunil Pathania, Dr. Rajeev Kumar Aggarwal	201811036457	A SYSTEM OF ARTIFICIAL NEURAL NETWORK MODEL FOR PRECISE ESTIMATION OF GLOBAL SOLAR RADIATION	August 14, 2020
22	Prakrati Garg, Aaliya Ali, Dr. Saurabh Kulshreshtha, Dr. Rohit Goyal, Dr. Azhar Khan	201811036459	AN OINTMENT FOR WOUND HEALING CONSISTS OF HEXANE EXTRACT OF MORINGA OLEIFERA SEEDS	August 14, 2020
23	Prakrati Garg, Aaliya Ali, Dr. Saurabh Kulshreshtha, Dr. Rohit Goyal, Dr. Azhar Khan	201811036458	AN OINTMENT FOR WOUND HEALING CONSISTS OF HYDRO ALCOHOLIC EXTRACT OF MORINGA OLEIFERA SEEDS	August 14, 2020
24	<u>Dr. Rajesh Kumar, Mr Ritesh Verma, Dr. Rajeev Kumar Aggarwal</u>	<u>201811036456</u>	<u>NEW EMPIRICAL SYSTEM FOR THE ESTIMATION OF GLOBAL SOLAR RADIATION FOR INDIAN LOCATIONS</u>	<u>August 14, 2020</u>

25	Dr. Mamta Shandilya, Dr. Radheshyam Rai, Dr. Rajesh Kumar, Ms Poonam Kumari, Mr Ritesh Varma	2018110 36624	NANOSCALE RESTRAINT OF POLAR COUPLING IN Ba <sub>0.85</sub> Mg <sub>0.15</sub> TiO <sub>3</sub> RELAXOR FERRO ELECTRIC	August 14, 2020
26	Rahul Thory, Chetna Rani, Maninder Kaur, Kawaljit Singh Sandhu, Archana Sinhmar	2018110 37033	BIODEGRADABLE BROAD SPECTRUM ANTIMICROBIAL FOOD PACKAGING FILM AND METHOD THEREOF	August 14, 2020
27	Pankaj Raizada, Anita Sudhaik, Pardeep Singh	2018110 38018	NOVEL Ag BASED HETEROJUNCTIONED NANOCATALYST FOR WASTEWATER PURIFICATION	August 14, 2020
28	Pardeep Singh, Pankaj Raizada, Anita Sudhaik, Reena Saini, Pankaj Thakur	2018110 38020	A METHOD FOR ENHANCING PHOTOCATALYTIC ACTIVITY OF EU <sup>3+</sup> - DOPED ZNO USING BI <sub>2</sub> O <sub>3</sub> AND GRAPHENE OXIDE FOR WATER PURIFICATION	August 14, 2020
29	Dr. Mamta Shandilya, Dr. Radheshyam Rai, Dr. Steven J.Milne, Dr. Rajesh Kumar	2018110 38017	HIGH DIELECTRIC LEAD FREE Ba <sub>0.95</sub> Ca <sub>0.05</sub> TiO <sub>3</sub> MATERIAL SYNTHESIZED BY HYDROTHERMAL METHOD FOR ENERGY HARVESTERS	August 14, 2020
30	Anil Kumar, Deshmukh Kiran Prakash Rao, Robin Thakur, Amar Raj Singh Suri, Sunil Kumar	2018110 38014	ABSORBER PLATE OF SOLAR AIR HEATER TRIANGULAR DUCT AND USES THEREOF	August 14, 2020
	Dr. Mamta Shandilya, Dr. Radheshyam Rai,		A Method for Low temperatures	

31	Dr. Rajesh Kumar, Dr. Madan Lal, Sapna	2018110 38019	synthesis of Ba <sub>0.85</sub> Ca <sub>0.15</sub> Zr <sub>0.05</sub> Ti <sub>0.95</sub> O <sub>3</sub> Ceramic for capacitor application	August 14, 2020
32	Abhilash Pathania, Adit Rana, Raj Kumar, Ranjeet Thakur	2018110 38015	ANTI-DRUG BAND	August 14, 2020
33	Bhaskar Goel, Sorabh Aggarwal	2018110 45727	A METHOD FOR ENHANCEMENT IN TRANSMISSION OF LIGHT BY DRY MACHINING OF PMMA DISCS	August 21, 2020
34	Nitika Thakur, Jyoti Kumar, Monu Sharma	2018110 49851	Broadspectrum polyherbal Formulation for treatment of neonatal Eye infections	August 21, 2020
35	Adit Rana, Raj Kumar	2018110 49886	A METHOD FOR SLOW CAPSULE DESICCANT PROFILE FOR RE- ENTRY AND TRAJECTORY TRACING	August 21, 2020
36	Pardeep Singh, Sheetal Sharma, Vishal Dutta, Pankaj Raizada	2018110 50058	Heterogenous photocatalyst for degradation of malachite green dye from waste water and method thereof	August 21, 2020
37	Pankaj Raizada, Vasudha Hasija, Kirti Sharma, Pardeep Singh	2018110 50064	Nanocomposite based photocatalyst for degradation of congo red dye from water and method thereof	August 21, 2020
38	Nitika Thakur And Apurva Bhardwaj	2018110 50078	Broad Spectrum Aqueous Extract with Antibiotic activity from Citrus	August 21, 2020

			pseudolimon and method thereof	
39	Reena V Saini, Adesh K Saini, Reena Kumari, Henok G Azalework	2018110 50079	Bioactive immunoboosting fractions From extracts of pine needles bio-waste and method thereof	August 21, 2020
40	Reena V Saini, Adesh K Saini, Eshu S Sinha, Prachi Vaid	2018110 50086	Biosynthesis of bimetallic Nanoparticles of silver and copper using <i>Stephania glabra</i> alcoholic extract	August 21, 2020
41	Rohit Jasrotia, Dr. Virender Pratap Singh, Dr. Rajesh Kumar, Dr. Mahavir Singh	2018110 49897	SYNTHESIS OF SILVER SUBSTITUTED Mg-Mn NANOFERRITES FOR APPLICATION IN RECORDING MEDIA	August 21, 2020
42	Rohit Jasrotia, Dr. Virender Pratap Singh, Dr. Mahavir Singh, Dr. Rajesh Kumar	2018110 50121	SYNTHESIS OF SILVER DOPED STRONTIUM W-TYPE NANOHEXAFERRITES FOR MAGNETIC RECORDING APPLICATION	August 21, 2020
43	Dr. Mamta Shandilya, Mr Shammi Kumar, Mr Ankush Chauhan, Dr. Rajesh Kumar, Dr. Shweta Thakur, Prof Nagesh Thakur	2018110 50120	A SYNTHESIS OF LEAD FREE $K_{0.5}Na_{0.5}NbO_3$ CERAMICS AT LOW SINTERING TEMPERATURE	August 21, 2020
44	Gaurav Gupta, Shaurya Bahuguna, Nimish Kappal, Manik Sharma	2018110 50123	METHOD OF MANUFACTURING OF HELMET AND USES THEREOF	August 21, 2020

45	Shashank Thapa, Anuj Kumar Chauhan, Shafaqat Iqbal, Pradipta Kumar Baral, A. Deva Divyan, Navendu Nanda, Aditya Sharma	2018110 50124	A METHOD FOR OPTIMIZATION OF CUTTING FORCE MEASURING MACHINE WITH IMPROVED TOPOLOGY	August 21, 2020
46	Rajat Singh, Somesh Sharma, Pankaj Chauhan	2018110 50122	A METHOD TO DEVELOP LOW CALORIE KINNOW BASED HERBAL BEVERAGE	August 21, 2020
47	Adit Rana, Raj Kumar, Saikat Ghosh, Arshdeep Singh, Abhisek Aggarwal, Raj Kumar Sharma, Prashant Katuwal, Chanra Shekhar Aazad	2019110 01085	SMART ENGINE IMMOBILISE CONTROL SYSTEM AGAINST UNLICENSED AND WITHOUT HELMET RIDERS OF TWO WHEELERS	August 28, 2020
48	Bhaskar Goel, Sorabh Aggarwal	2019110 01086	A METHOD FOR ACHIEVING MIRROR FINISH ON MONO-CRYSTALLINE GERMANIUM DISC	August 28, 2020
49	Mr. Rohit Jasrotia, Dr. Virender Pratap Singh, Dr. Rajesh Kumar, Dr. Mahavir Singh	2019110 01088	SOL-GEL SYNTHESIZED BARIUM M-TYPE HEXAGONAL FERRITES FOR HIGH DENSITY RECORDING MEDIA APPLICATION	August 28, 2020
50	Ashwani Kumar, Dr. Inder Singh, Shalini Sharma, Dr. Robin Thakur	2019110 01087	A SYSTEM AND PROCESS FOR MITIGATION OF CHROMATIC DISPERSION	August 28, 2020
51	Sorabh Aggarwal, Bhaskar Goel, Sundar M, Susmita K, Swati, Deepika Sharma, C. Narasimha	2019110 01702	UNIVERSAL SPANNER APPARATUS AND	August 28, 2020

	Reddy		USES THEREOF	
52	Gaurav Sharma, Devika Rana, Neeraj Mahindroo	2019110 02018	ANTIMALARIAL SINGLE HERB EXTRACT OF NICANDRA PHYSALODES AND METHOD THEREOF	August 28, 2020
53	Diya Mittal, Adesh K. Saini	2019110 05125	AN ECO- FRIENDLY NATURAL BIOFERTILIZER/ BIOCONTROL AGENT	August 14, 2020
54	Pardeep Kumar, Sanjay Garg	2019110 05095	BITUMEN CONCRETE MIXTURE WITH POLYTHENE FOR THE CONSTRUCTION OF PAVEMENT AND METHOD THEREOF	August 14, 2020
55	Abhishek Vatsi, Er. Sanjay Garg	2019110 05094	COMBINED MIX OF CEMENT MORTAR DUST AND FLY ASH AS FILLER IN BITUMINOUS CONCRETE MIX AND METHODS THEREOF	August 14, 2020
56	Raman, Vivek Thakur	2019110 05093	BAMBOO REINFORCED CONCRETE MATERIAL AND USES THEREOF	August 14, 2020
57	Prakritee Rana, P.L Goel	2019110 05096	A COMPOSITION AND METHOD OF MANUFACTURIN G OF CLAY BRICKS USING WOOD SAW DUST ASH	August 14, 2020
			PORTABLE ELECTRONIC DEVICE FOR QUICK	



58	Kritika Saini, Ankur Kaushal, Shagun Gupta, Dinesh Kumar	2019110 05723	DETECTION OF THE FOOD POISONING MICROBE <i>Listeria monocytogenes</i> USING BIOSENSOR	August 28, 2020
59	Sunil Kumar, Anil Kumar, Robin Thakur	2019110 05560	HEAT EXCHANGER NANOFUIDS AND METHODS THEREOF	August 14, 2020
60	Anil Kumar, Robin Thakur, Sunil Kumar, Kamal Kashyap	2019110 05559	METHOD AND SYSTEM FOR ESTIMATED EFFICIENCIES IN VARIOUS BAFFLE SURFACES SOLAR AIR COLLECTOR	August 14, 2020
61	Kartik Chauhan, Er. Rupak Nagraik	2019110 05622	A NOVEL STERILIZATION AND INCUBATION CHAMBER	August 14, 2020
62	Dr. Rajesh Kumar, Ritesh Verma, Ankush Chauhan, Satvinder Kour, Dr. Mamta Shandilya, Dr. Pardeep Singh	2019110 05623	MATERIALS TO ENHANCE THE EFFICIENCY OF SOLAR RECEIVER IN CONCENTRATED SOLAR POWER PLANT (CSP)	August 14, 2020
63	Dr. Amita Kumari, Ms. Sonam Thakur, Dr. Vikas Kumar, Ms. Prakriti Nidhi, Prof. Anuradha Sourirajan	2019110 05624	A KIT FOR IDENTIFICATION OF BEST HARVESTING TIME FOR THE EXTRACTION OF ESSENTIAL OIL OF MENTHA LONGIFOLIA	August 14, 2020
64	Mamta Shandilya, Shweta Thakur, Amit Mahajan, Poonam Kumari, Radheshyam Rai	2019110 07198	LEAD FREE, FERROELECTRIC , NANO SIZED CERAMIC COMPOUND (BZT-BCT) FOR INDUSTRIAL USE	September 04, 2020

65	Mamta Shandilya, Shweta Thakur	2019110 07200	METHOD OF LOW TEMPERATURE SYNTHESIS OF LEAD FREE, FERROELECTRIC , NANO SIZED MONOPHASIC CERAMIC COMPOUNDS	September 04, 2020
66	Rajesh Kumar, Ankush Chauhan, Ritesh Verma, Mamta Shandilya, Pankaj Raizada, Saurabh Kulshreshtha	2019110 08270	ZINC OXIDE NANORODS AND METHOD OF PRODUCING THE SAME	September 04, 2020
67	Rachna Verma, Ashwani Tapwal, Dinesh Kumar, Sunil Puri	2019110 08271	A METHOD FOR IMPROVING BIOSYNTHESIS OF PHYTOCHEMICALS AND ANTIOXIDANT POTENTIAL OF ACORUS CALAMUS PLANT	September 04, 2020
68	Pankaj Raizada, Kirti Sharma, Pardeep Singh	2019110 09449	COMPOSITE PHOTOCATALYST FOR TREATMENT OF WATER POLLUTED WITH ORGANIC DYES AND METHOD THEREOF	September 04, 2020
69	Divya Mittal, Reena V Saini, Adesh K Saini, Rakesh Shukla, Yashwant Singh Negi	2019110 10766	AN ECO- FRIENDLY ACINETOBACTER CALCOACETICUS BASED BIOFERTILIZER/ BIOCONTROL COMPOSITION	September 25, 2020
70	Divya Mittal, Reena V Saini, Adesh K Saini, Arun Kumar, Jagdish Verma, Rakesh Shukla, Yashwant Singh	2019110 10767	AN ECO- FRIENDLY BACILLUS BASED BIOFERTILIZER/ BIOCONTROL COMPOSITION	September 25, 2020

	Negi			
71	Divya Mittal, Reena V Saini, Adesh K Saini, Arun Kumar, Yamini Jain, Rakesh Shukla, Yashwant Singh Negi	2019110 10768	AN ECO- FRIENDLY BURKHOLDERIA BASED BIOFERTILIZER/ BIOCONTROL COMPOSITION	September 25, 2020
72	Prakriti Nidhi, Rajan Rolta, Prof. Kamal Dev, Prof. Anuradha Sourirajan	2019110 10808	A SYNERGISTIC ANTI-FUNGAL COMPOSITION OF ESSENTIAL OIL EXTRACTED FROM NEEDLES OF JUNIPERUS COMMUNIS WITH ANTIBIOTICS FOR TREATING CANDIDIASIS	September 25, 2020
73	Divya Mittal, Reena V Saini, Adesh K Saini, Arun Kumar, Hem Parkash Verma, Rakesh Shukla, Yashwant Singh Negi	2019110 11827	AN ECO- FRIENDLY ENTEROBACTER BASED BIOFERTILIZER/ BIOCONTROL COMPOSITION	October 02, 2020
74	Divya Mittal, Arun Kumar, Reena V Saini, Adesh K Saini, Rakesh Shukla, Yashwant Singh Negi.	2019110 11828	AN ECO- FRIENDLY KLEBSIELLA BASED BIOFERTILIZER/ BIOCONTROL COMPOSITION	October 02, 2020
75	Divya Mittal, Arun Kumar, Reena V Saini, Adesh K Saini, Rakesh Shukla, Yashwant Singh Negi.	2019110 11829	AN ECO- FRIENDLY PANTOEIA BASED BIOFERTILIZER/ BIOCONTROL COMPOSITION	October 02, 2020
76	Divya Mittal, Hem Parkash Verma, Reena V Saini, Adesh K Saini, Rakesh Shukla, Yashwant Singh Negi	2019110 11851	AN ECO- FRIENDLY PSEUDOMONAS BASED BIOFERTILIZER/ BIOCONTROL COMPOSITION	October 02, 2020
	Divya Mittal, Hem Parkash Verma,		AN ECO- FRIENDLY SERRATIA	

77	Reena V Saini, Adesh K Saini, Rakesh Shukla, Yashwant Singh Negi	2019110 11850	MARCESCENS BASED BIOFERTILIZER/ BIOCONTROL COMPOSITION	October 02, 2020
78	Pankaj Raizada, Prachi Thakur, Vasudha Hasija, Pardeep Singh	2019110 11873	A HYBRID TERNARY PHOTOCATALYST FOR THE RAPID TREATMENT OF WATER CONTAMINATED WITH RHODAMINE B DYE AND METHOD THEREOF	October 02, 2020
79	Robin Thakur, Nitin Rana, Anil Kumar, Sunil Kumar, Varun Bhola, Nabeen Kumar Sheet, Vikrant Garg, Emini Bezawada, Sunil Singh	2019110 12293	Weight Lifting Equipment	October 02, 2020
80	Ankush Chauhan, Swati, Rajesh Kumar, Saurabh Kulshreshtha, Mamta Shandilya, Sonu, Vikrant Sharma	2019110 12292	A Process of Synthesis of Ag- ZnO Nanoparticles using Trillium Govanianum	October 02, 2020
81	Pankaj Raizada, Vasudha Hasija, Pardeep Singh, Anita Sudhaik	2019110 12291	Z-scheme Photocatalyst and a Process for the Preparation Thereof	October 02, 2020
82	Ashwani Kumar, Shalini Sharma, Dr. Robin Thakur, Dr. R.P. Dwivedi	2019110 12362	A SYSTEM FOR COMPENSATION OF DISPERSION IN OPTICAL FIBRE COMMUNICATION AT HIGHER DATA RATE OF 100GBPS OVER A LONGER DISTANCE OF 120KM	October 02, 2020
83	Harshit Bhatt, Wasi Rasooli, Brij Bhushan	2019110 12735	ANTI-THEFT & VEHICLE IDENTIFICATION SYSTEM AND	October 02, 2020

			METHODS THEREOF	
84	Vibhav Dhadwal, Savita, Brij Bhushan	2019110 12361	INFRA-RED SENSOR BASED PLATFORM LIGHT SYSTEM	October 02, 2020
85	Varun Jaiswal, Akash Ujjwal, Shwetamber Pathak, Sujit Thakur	2019110 12363	BOTTLE FOR HEATING OF LIQUID THROUGH MANUAL ROTATION	October 02, 2020
86	Dr. M.S. Thakur, Er. Veena Kashayap, Er. Deepak	2019110 12510	COMPOSITION OF FIBER REINFORCED CONCRETE MIX AND METHODS THEREOF	October 02, 2020
87	Er. Vikas Mehta, Dr. M.S. Thakur	2019110 12512	COMPOSITION OF WASTE PAPER SLUDGE ASH AS SUPPLEMENTAR Y MATERIAL FOR CEMENT AND METHODS THEREOF	October 02, 2020
88	Dr. M.S. Thakur, Er. Vikas Mehta, Er. Veena Kashyap, Er. Priyanka	2019110 12416	A METHOD OF ENGLISH BOND BRICK MASONRY BY A NUMBERING TECHNIQUE AND USES THEREOF	October 02, 2020
89	Er. Bhupender Kumar, Dr. M.S. Thakur, Er. Vikas Mehta	2019110 12737	Process of Thickness on the Rubberized Base Isolator in RCC 8- Story Frames and Uses thereof	October 02, 2020
90	Brij Bhushan	2019110 12736	A SYSTEM FOR FULLY AUTOMATIC INDIRECT SOLAR DRYER	October 02, 2020
91	Mamta Shandilya, Shweta Thakur, Radheyshyam Rai, Sapna Thakur	2019110 12842	BARIUM STRONTIUM TITANATE MATERIAL AND METHOD OF MANUFACTURIN G THE SAME	October 02, 2020
	Mamta Shandilya,		BARIUM ZIRCONATE	

92	Radheyshyam Rai, Poonam Kumara, Gun Anit Kaur	2019110 12843	TITANATE MATERIAL AND METHOD OF MANUFACTURING THE SAME	October 02, 2020
93	Dr Mamta Shandilya	2019110 12931	A Process for synthesis of Lead Free Barium, Strontium Titanate Ba <sub>0.90</sub> Sr <sub>10</sub> TiO <sub>3</sub>	October 02, 2020
94	Ankush Chauhan, Swati, Rajesh Kumar, Saurabh Kulshreshtha, Mamta Shandilya, Anil Kumar, Zubin Thakur	2019110 12932	A Process for synthesis of Silver Doped Zinc Oxide using Cannabis Sativa Leaf Extract	October 02, 2020
95	Dr Mamta Shandilya, Dr Radheshyam Rai, Gun Anit Kaur, Dr Shweta Thakur	2019110 12933	A process of synthesis of barium titanate zirconate BaTi <sub>1-x</sub> Zr <sub>x</sub> O <sub>3</sub> ceramics nanoparticles	October 02, 2020
96	Prince Chawla, Ravinder kaushik, Naveen Kumar	2019110 16467	DIAGNOSTIC AGENT FOR QUICK VISUAL DETECTION OF THE PESTICIDE MONOCROTOPH OS	October 30, 2020
97	Dr. Amita Kumari, Ishita Guleria, Dr. Vikas Kumar	2019110 17410	AN ANTIBACTERIAL COMPOSITION AND USES THEREOF	November 03, 2020
98	Er. Veena Kashyap, Dr. M.S. Thakur, Er. Deepak	2019110 17412	METHOD TO ANALYSE THE EFFECT OF THE MASS IRREGULARITY IN RCC BUILDING OF MODERATE HEIGHT	November 06, 2020
99	Er. Neha Thakur, Dr. M. S. Thakur	2019110 18049	METHOD TO ANALYSE EFFECT OF THE STIFFNESS IRREGULARITY IN 9- STOREY RCC BUILDINGS	November 13, 2020
	Brij Bhushan, Dr. Nagesh Kumar, Ruchika Sharma	2019110	AN AUTOMATIC GAS STOVE LPG	November 13,

100		18048	CUT OFF SYSTEM USING ARDUINO	2020
101	Gourav Chandan, Reena V. Saini	2019110 22427	IMMUNOMODULATORY/ANTI-INFLAMMATORY STEROIDAL LACTONE COMPOUND AND METHOD FOR PREPARING THE SAME	December 11, 2020
102	Menaka Thakur, Divya Mittal, Adesh K. Saini, Prem Kumar Khosla, Sunil Puri	2019110 22785	A METHOD AND COMPOSITION TO ENHANCE DROUGHT TOLERANCE OF PLANT BY USING ENTEROBACTER CLOACAE BACTERIAL STRAIN	December 11, 2020
103	Gourav Chandan, Reena V. Saini	2019110 24277	IMMUNOMODULATORY/ANTI-INFLAMMATORY STEROIDAL LACTONE COMPOUND DATURLIN AND METHOD FOR PREPARING THE	December 25, 2020
104	Gourav Chandan, Reena V. Saini	2019110 24279	IMMUNOMODULATORY/ANTI-INFLAMMATORY STEROIDAL LACTONE COMPOUND DATURALACTONE AND METHOD FOR PREPARING	December 25, 2020
105	Adit Rana, Dr Kamal Dev, Dr Raj Kumar, Abhilash Pathania, Nidhi Kapoor	2019110 26508	SULLAGE WATER TREATMENT PLANT AND THE METHOD OF USE THEREOF	January 08, 2021

106	Noorullah Yusufi, Er. Vikas Mehta, Dr. M.S. Thakur, Priyanka Panchal	2019110 26507	A METHOD FOR PREPARING BITUMINOUS CONCRETE MIXES BY USING FLY-ASH AND WASTE POLYETHYLENE.	January 08, 2021
107	Prakriti Nidhi, Dr. Poonam Negi, Prof. Kamal Dev, Prof. Anuradha Sourirajan	2019110 27500	HERBAL GEL FORMULATION CONTAINING ESSENTIAL OIL OF MENTHA LONGIFOLIA FOR ORAL CANDIDIASIS	January 15, 2021
108	Ashutosh Kumar Dash, Deepak Kumar	2019110 28140	A PROCESS FOR SYNTHESIS OF CHROMENE DIHYDROPYRIMI DINONES USING Fe/Al PILLARED CLAY	January 15, 2021
109	Dhriti Verma, Deepak Kapoor, Deepak Kumar	2019110 31223	NOVEL DRUG LOADED MESOPOROUS POLYHEDRAL OLIGOMERIC SILSESQUIOXAN E SYSTEM, PROCESS AND COMPOSITION THEREOF	February 05, 2021
110	Ms. Anshika Sharma, Ms. Prakriti Nidhi, Mr. Rajan Rolta, Prof. Kamal Dev, Prof. Anuradha Sourirajan	2019110 32547	COMPOSITION COMPRISING ESSENTIAL OIL AND SOLVENT EXTRACTS OF ARTEMISIA ANNUA AS BIOAVAILABILIT Y ENHANCER OF FLUCONAZOLE AND AMPHOTERICIN B TO MANAGE	February 19, 2021



			CANDIDIASIS	
111	Mohammad Adil, Dinesh Kumar	2019110 32821	Probiotic drink and process for the preparation thereof	February 19, 2021
112	Adit Rana, Dr. Kamal Dev, Dr. Raj Kumar, Chander Mohan Gupta, Nidhi Kapoor	2019110 33831	A SYSTEM FOR AUTOMOBILE COOLING/ HEATING USING AIR MULTIPLIER TECHNIQUES	February 26, 2021
113	Mr. Rajan Rolta, Dr. Vikas Kumar, Prof. Anuradha Sourirajan , Prof. Kamal Dev	2019110 34475	AN ANTIFUNGAL FORMULATION PREPARED FROM PHYTOCOMPOUNDS OF RHEUM EMODIAS BIO ENHANCER FOR ANTIBIOTICS.	March 05, 2021
114	Komal Sharma, Aniruddha Mitra	2019110 37067	A PROCESS FOR PRODUCTION OF BIOFUEL FROM LARVAE OF RICE MOTH CORCYRA CEPHALONICA AND BIOFUEL THEREOF	March 19, 2021
115	Kartik Chauhan, Ankur Kaushal, Rupak Nagraik, Brij Bhushan	2019110 33263	A portable laminar airflow cabinet cum incubator	February 19, 2021
116	Mukul Kumar, Ravinder Kaushik, Samriti Guleria, Azhar Khan	2019110 38182	A HERBAL COMPOSITION FOR ANTI- OBESITY ACTIVITY AND METHOD OF PREPARING THE SAME	March 26, 2021
117	Sarveet Singh, Ravinder Raina, Richa Puri	2019110 39016	A PROCESS FOR THE PRODUCTION OF ECO-FRIENDLY AROMATIC HERBAL	April 02, 2021

			GREEN COLOUR AND HERBAL GREEN Colour Thereof	
118	Sarveet Singh, Ravinder Raina, Richa Puri	2019110 39020	A PROCESS FOR THE PRODUCTION OF ECO-FRIENDLY AROMATIC HERBAL PINK COLOUR AND HERBAL PINK COLOUR THEREOF	April 02, 2021
119	Sarveet Singh, Ravinder Raina, Richa Puri	2019110 39021	A PROCESS FOR THE PRODUCTION OF ECO-FRIENDLY AROMATIC HERBAL YELLOW COLOUR AND HERBAL YELLOW COLOUR THEREOF	April 02, 2021
120	Nipun Batis, Koushik Das Sarma, Bhaskar Goel	2019110 39610	A system of car cabin suffocation remover and methods thereof	April 02, 2021
121	Adesh K. Saini, Deepak Pathania, Swadeep Sood, Rakesh Kumar, Sarita	2019110 39612	A Drug delivery system of carboxymethyl cellulose-cl- poly(lactic acidco- itaconic acid)/ZnO- Ag nanocomposite and methods thereof	April 02, 2021
122	Dr. Ravinder Kaushik, Anuj Saklani	2019110 39613	A METHOD TO DEVELOP NON-CEREAL STARCH BASED EXTRUDED SNACKS	April 02, 2021
123	Brij Bhushan	2019110 39609	SMOKE AND TEMPERATURE SENSOR SYSTEM FOR CONTROL EXHAUST FAN AND KITCHEN CHIMNEY	April 02, 2021

124	Brij Bhushan	2019110 39608	A SYSTEM OF POWER SUPPLY FOR COMPUTER DESKTOP CPU WITH BACKUP	April 02, 2021
125	Brij Bhushan, Pankaj Vaidya	2019110 39614	AUTOMATIC AC MAINS CUT OFF SYSTEM ON LPG GAS LEAKAGE USING ARDUINO WITH SMS ALERT TO THE USERS	April 02, 2021
126	Dr. Rajesh Kumar, Allah Dekama Jara, Ritesh Verma, Ankush Chauhan	2019110 39611	SPIN- DEPENDENT TRANSPORT PROPERTIES OF GRAPHITE NANOSTRUCTURES AND METHODS THEREOF	April 02, 2021
127	Adit Rana, Prof Kamal Dev, Dr. Raj Kumar, Prof. (Dr.) Sham Singh Chandel, Nidhi Kapoor, Prof. Anuradha Sourirajan	2019110 39615	A SINGLE PLATFORM MULTI-TEMPERATURE SOLAR POWERED ORBITAL SHAKER INCUBATOR FOR GROWING MICROORGANISMS AT DIFFERENT TEMPERATURE AND METHOD OF USE THEREOF	April 02, 2021
128	Nidhi Chaudhary, Aniruddha Mitra	2019110 47886	A PROCESS FOR PRODUCTION OF BIOFUEL FROM THE COCKROACH PERIPLANETA AMERICANA AND BIOFUEL THEREOF	May 28, 2021
	Garima Bisht, Prof. Kamal Dev, Prof.	2019110	BIO-PIGMENT BASED COTTON FABRICS WITH	May 28,

129	Anuradha Sourirajan	48223	ANTIMICROBIAL PROPERTIES AND METHOD OF USES THEREOF	2021
130	Azhar Khan, Keshav Chandel, Huma Khan, Mukul Kolish	2019110 50879	ANTI-OBESITY EFFECT OF EXTRACTS PREPARED FROM FICUS BENGHALENSIS	June 11, 2021
131	Azhar Khan, Huma Khan, Pratibha Sharma, Saurabh Kulshreshtha	2019110 50880	AN INSILICO METHOD TO ANALYZE POLYPHENOLS FROM CRATAEGUS PINNATIFIDA AS AN ACE INHIBITOR	June 11, 2021
132	Ms. Surbhi Gautam, Dr. Uma Ranjan Lal, Dr. Aditi Sharma, Ms. Charul Rathore, Dr. Navneet Upadhyay, Dr. Kaiser Raza, Dr Poonam Negi	2019110 51403	CHEBULINIC ACID FORMULATIONS FOR GASTRIC DELIVERY AND METHOD THEREOF	June 18, 2021
133	Alpana Bisht, Prakriti Nidhi, Rajan Rolta, Charul Rathore, Dr. Navneet Upadhyay, Prof. Kamal Dev, Prof. Anuradha Sourirajan, Dr. Poonam Negi	2019110 51402	AZELAIC ACID AND MELALEUCA ALTERNIFOLIA ESSENTIAL OIL CO-LOADED VESICULAR SYSTEM FOR TOPICAL ADMINISTRATIO N	June 18, 2021
134	Alpana Bisht, Prakriti Nidhi, Rajan Rolta, Prof. Kamal Dev, Prof. Anuradha Sourirajan, Dr. Poonam Negi	2019110 53824	ANTI-ACNE MICROEMULSIONS FOR TOPICAL ADMINISTRATIO N CO-LOADED WITH AZELAIC ACID AND TEA TREE ESSENTIAL OIL	July 02, 2021
135	Kartik Chauhan, Dr. Rupak Nagraik	2019110 54084	CURVED ROOF POLYHOUSE STRUCTURE FOR WATER HARVESTING	July 02, 2021

136	Azhar Khan, Huma Khan, Dr. Md. Zubair Malik, Monika Kataria, Dr. Aziz Ur Rahman	201911053826	A METHOD FOR EVALUATION OF ANTI-HYPERTENSIVE ACTIVITY OF HIBISCITRIN TARGETING ANGIOTENSIN CONVERTING ENZYME	July 02, 2021
137	Neeraj Gupta, Abhishek Soni	202011000732	A PROCESS FOR IONIC LIQUID ASSISTED CHEMICAL FIXATION OF CARBON DIOXIDE	July 09, 2021
138	Mamta Sharma, Pankaj Thakur, Reena V. Saini, Monika	202011003403	SILVER NANOPARTICLE S AND A METHOD FOR SYNTHESIS THEREOF	July 30, 2021

### 3.6 Ph.D's awarded:

Sr. No.	Name of the PhD	Name of the Department	Name of the guide/s	Title of the thesis	Year of registration of the scholar
1	Abhishek Bhardwaj	Faculty of Applied Sciences and Biotechnology	Dr Saurabh Kulshreshtha	Isolation and Characterization of Pepper Leaf curl Virus (PepLCV), the Suspected Causative Agent of Leaf curl Disease (LCD) in Bell-pepper, Hot-pepper and Tomato Crops in Different Districts of Himachal Pradesh	2014

2	Menka	Faculty of Sciences	Dr P K Khosla	Isolation and Characterization of Drought Tolerant Plant Growth Promoting Rhizobacteria (PGPR) Strains Associated with Spilanthes Acmella Murr. From Western Himalayas	2014
3	Anita Sudhaik	Faculty of Sciences	Dr. Pankaj Raizada	Fabrication of Graphitic Carbon Nitride Metal free Nanocomposites for Pesticide Degradation and Bacterial Disinfection	2017
4	Devika Rana	Faculty of Pharmaceutical Sciences	Dr Neeraj Mahindroo	Target Based Drug Discovery of Dual Falcipain Inhibitors as Antimalarial	2015
5	Prakriti Nidhi	Faculty of Applied Sciences and Biotechnology	Prof. Anuradha Sourirajan	Development of Antifungal Therapeutics Based on Essential Oils of Medicinal and Aromatic Plants of Northwestern Himalayas	2016
6	Nardender Verma	Faculty of Management Sciences and Liberal Arts	Prof Y.S Negi	Investment of Gold and Gold Exchange Traded Funds (ETFs): An Exploratory Study in Himachal Pradesh, India	2012
7	Radha	Faculty of Sciences	Dr Sunil Puri	Forage, Forage Quality and Ethnoveterinary Medicines in Sustainable Livestock Rearing in Tribal Areas of Western Himalaya	2016
8	Amar Yadav	Faculty of Management Sciences and Liberal Arts	Dr. Devesh Kumar	A Study On The Relationship Between Selected Macro-Economic Variables and Stock Indices	2018

9	Jureka Mankotia	Faculty of Applied Sciences and Biotechnology	Dr Azar Khan	Molecular Characterization and Gene Sequencing of Multi drug Resistance and Extensively Drug Resistance Strains of Mycobacterium Tuberculosis Isolated from Retreatment and New Cases in Himachal Pradesh	2016
10	Ravi Vishsit	Faculty of Management Sciences and Liberal Arts	Dr Kesari	Emotional Intelligence: Exploring its Relationship with Conflict Management Occupational Stress and Job Satisfaction of Doctors	2017
11	Prachi Ved	Faculty of Applied Sciences and Biotechnology	Dr Reena V Saini	Anti-cancer Activity of Bimetallic Nanoparticles Derived from <i>Stephania Glabra</i> of Western Himalayas	2016
12	Gaurav Chandan	Faculty of Applied Sciences and Biotechnology	Dr Reena V Saini	Anticancer Immune Responses Mediated Through Bioactive Phytochemicals from <i>Datura Stramonium</i> of Western Himalayas : an Insight into Immune Cells	2015
13	Shruti Sharma	Faculty of Applied Sciences and Biotechnology	Dr Kamal Dev	Drug Resistance Genes and Biotechnological Potential of Halophiles Isolated from Saline Lake of North Western Himalayas	2015
14	Amanpreet Kaur Virk	Faculty of Applied Sciences and Biotechnology	Dr Saurabh Kulshreshtha	Towards the Development of a Better, Safe, and Environment Friendly Method of Purify Water using <i>Moringa oleifera</i>	2015
15	Rohit Khargotra	Faculty of Engineering and	Dr Raj Kumar	Performance Investigation of Solar Water Heater With Delta Type Hindrance	2017

		Technology		Promoter	
16	Kamal Kashyap	Faculty of Engineering and Technology	Dr Robin Thakur	An Experimental Study for Efficient Conversion of Traditional Water Mills (Gharats) into Micro Hydro-Power Stations Utilizing Archimedes Screw Turbine	2015
17	Chander Mohan Gupta	Faculty of Management Sciences and Liberal Arts	Dr. Devesh Kumar	Financial Crimes in India: A Critical Analysis on the Role of Regulatory Bodies	2018
18	Kritika Saini	Faculty of Applied Sciences and Biotechnology	Dr Dinesh Kumar	Electrochemical Genosensor for the detection of food borne pathogens	2016
19	Bharti Thakur	Faculty of Basic Sciences	Dr Gaurav Sharma	Nanocomposite Hydrogels: Fabrication, Characterization and Applications	2016
20	Deepika Sharma	Faculty of Sciences	Dr Neeraj Gupta	Carbon based catalyst for the activation of unreactive carbon-hydrogen bond and biomass conversion	2017
21	Kanika Dulta	Faculty of Applied Sciences and Biotechnology	Dr Pankaj Chauhan	Green synthesis of nanoparticles from plants of Himalayan region and their <i>in-vitro</i> antimicrobial activities against fruit and vegetable pathogens	2015
22	Monika	Faculty of Applied Sciences and Biotechnology	Dr Astha Tripathi	In vitro Analysis of Pharmacological Aspects of <i>Morchella spp.</i> Collected from Northern Western Himalayan	2016



		gy		Regions	
23	Isha Sharma	Faculty of Applied Sciences and Biotechnology	Dr Astha Tripathi	Identification and Purification of Bioactive Compounds from wild <i>Irpex lacteus</i>	2016
24	Ankita Verma	Faculty of Management Sciences and Liberal Arts	Dr Y.S Negi	An Analysis of Scope and Implementation of the Maternity Benefit Act in North Indian State of Himachal Pradesh	2017
25	Naresh Chandel	Faculty of Sciences	Dr Pardeep Singh	Zn Fe <sub>2</sub> O <sub>4</sub> and COFe <sub>2</sub> O <sub>4</sub> Based Heterojunction Photo-Catalysts for Photo Catalytic dye Degradation	2012
26	Diksha Chauhan	Faculty of Engineering and Technology	Dr R P Dwivedi	Design and Simulation of Plasmonic Devices for Application in Photonic and Electronic Integrated Circuits	2017
27	Ashima Dogra	Faculty of Sciences	Dr Neeraj Gupta	Designing metal free carbon catalysts for potential applications in Organic reactions, synthesis and biomass valorisation	2017
28	Gajender Singh	Faculty of Pharmaceutical Sciences	Dr Ashutosh Kumar Dash	Characterization and Biological evaluation of chemical constituent from <i>Pinus gerardiana</i> , <i>Inula racemosa</i> , <i>Aconitum heterophyllum</i> and <i>picrorhiza kurroa</i> extracts	2016
29	Tokuma Getahum	Faculty of Sciences	Dr Neeraj Gupta	Phytochemical Investigation, Antibacterial and Antioxidant Studies of the Essential oils or Extracts from <i>Lepidium</i>	2018

				<i>sativum, Aloe debrana and Laggera tomerntosa</i>	
30	Ruhi Pathania	Faculty of Applied Sciences and Biotechnology	Dr Azar Khan	Formulation and Characterization of Herbal Nanogel for Fungal Skin infections	2017
31	Divya Jyoti Thakur	Faculty of Management Sciences and Liberal Arts	Dr Pooja Verma	Effectiveness of Leadership in Pharmaceutical Industry of Himachal Pradesh, India	2017
32	Shailja Kumari	Faculty of Sciences	Dr J M Julka	Phenotypic and Genetic Diversity of Peregrine Earthworms in Western Himalaya	2015
33	Sangeeta Bhogal	Faculty of Sciences	Dr Gaurav Sharma	Trimetallic nanoparticles and their nanocomposites ; fabrication, characterization and applications	2016
34	Kiran Thakur	Faculty of Applied Sciences and Biotechnology	Dr Amit Seth	Development of a Colorimetric Sensor for Nitrile hydratase enzyme, Bacterial Immobilization and Himalayan Medicinal Fern Mediated Green Synthesis of Nanoparticles for Dye Degradation	2017
35	Avinash	Faculty of Applied Sciences and Biotechnology	Dr Pankaj Chauhan	Studies on biocompatibility and evaluation of green synthesized nanoparticles from Himalayan region for antimicrobial and antidiabetic activities	2014
36	Henok Gulilat Azalework	Faculty of Applied Sciences and Biotechnology	Dr Reena V Saini	Demonstration of the anticancer immune responses generated by the phytocomponents present in the needles of	2017

		gy		Western Himalayan <i>Pinus roxburghii</i> sarg.	
37	Ankush Chauhan	Faculty of Sciences	Dr Rajesh Kumar	Effect of Transition and Rare Earth Metal Ions on Structural, Morphological and Optical Properties of Potassium Sodium Niobate	2017
38	Arti Kumari	Faculty of Sciences	Dr Sunil Puri	Nutraceutical Potential of Wild Food used by Gaddis: a Tribal Community of Western Himalaya	2016
39	Sheetal Choudhary	Faculty of Sciences	Dr Mamta Sharma	Green Synthesis of nanoparticles and nanoemulsions from allelopathic plants of Lower Himalaya and its evaluation for Antimicrobial, Antifungal and Weedicidal efficiency	2017
40	Suman	Faculty of Engineering and Technology	Dr Neeraj Gandotra	Novel Entropy Based Pythagorean and Picture Fuzzy Approach for Solving Multi-Criteria Decision Making Issues	2018
41	Nisha Kumari	Faculty of Sciences	Dr Rajesh Kumar	Structural, Morphological and Magnetic Properties of Metal doped Magnetic Nanoferrites by using Sol- Gel Auto-Combustion Technique	2017
42	Anjana Kumari	Faculty of Applied Sciences and Biotechnology	Dr Nitika Thakur	Characterization of Wild Pleurotus Isolated from Different Region of North-Western Himalayas	2015

43	Ritesh Verma	Faculty of Sciences	Dr Rajesh Kumar	Investigation of Structural, Morphological, Electrical and Optical Properties of A -sites and B-sites doped ABO <sub>3</sub> Perovskite Material	2017
44	Gaurav Thakur	Faculty of Applied Sciences and Biotechnology	Dr Kamal Dev	Studies on Genetic Divergence and Association of Genotype and Phytochemicals of <i>Aegle marmelos</i> in Himachal Pradesh	2014
45	Khyati Oberoi	Faculty of Applied Sciences and Biotechnology	Dr Somesh Sharma	Studies on Microencapsulated Probiotic Starter Cultures for the Development of Functional Beverages	2017
46	Zeba Manzar	Faculty of Sciences	Dr Aniruddha	Exploring the Relative Bitterness and Toxicity of Different Bitter Compounds using <i>Drosophila Melanogaster</i> .	2017
47	Vijay Chauhan	Faculty of Sciences	Dr P K Khosla	Chemosystematic Investigation of <i>Juniperus</i> Diversity in Cold Desert of Himachal Pradesh.	2015
48	Somvir Singh	Faculty of Sciences	Dr Sunil Puri	Osmolyte Mediated Tolerance to Water Stress in <i>Lepidium Sativum</i> L. (Brassicaceae).	2017
49	Prince Manta	Faculty of Pharmaceutical Sciences	Dr Deepak Kapoor	Development of Immune Chromatographic test Strip for Rapid Detection of Zika Virus in Humans	2016
50	Deeksha Salaria	Faculty of Applied Sciences and Biotechnology	Dr Vikas Kumar	Characterization of Medicinal Properties of <i>Thymus serpyllum</i> and <i>Cymbopogon citratus</i> Essential oils from North-Western Himalayas by <i>in</i>	2017

				<i>Silico and in Vitro</i> analysis.	
51	Lavanya Tondon	Faculty of Sciences	Dr Pankaj Thakur	Protein Stabilized Bio Active Lead and Gold Nanomaterials for their Biological Application.	2017
52	Deepanjli Sharma	Faculty of Sciences	Prof. Adesh K. Saini	Antimicrobial Traits of the Biologically Synthesized Nanoparticles form the Extracts of Citrus Species .	2018
53	Priyanka Thakur	Faculty of Sciences	Prof. Adesh K. Saini	Genetic and Biochemical Studies to understand the role of eIF2A in Non-canonical translation initiation under stress conditions using yeast model	2017

**3.7 a. Research Papers Published in UGC Listed Journals:** 370

**b. Books Chapters Published:** 45

### 3.8 Consultancy

University has a proper policy backed by statutes to enable its faculty to provide consultancy. The concerned company can approach the faculty concerned either directly or through the deans or by writing to the Vice Chancellor. While requesting for consultation they give a detailed statement of the problem and what they are looking for. The same is then put up to the Vice Chancellor who gives his assent to the faculty, after assuring himself with the ability of the faculty to be in a position to provide reasonable solutions. Vice Chancellor takes into account all related factors such as the compatibility of the activity with the responsibilities and commitments of the faculty, potential conflicts of interest and the use of university resources. There are two types of consultancies provided by the University – research related, and non-research related. A faculty member or a team provides research support as a consultancy assignment in return for a research fee from an external funder. A Research Consultancy may be the outcome of a tender or a direct approach by an external agency or industry. Non-research Consultancies include non-research activities performed under contract for a third party.

**Revenue generated from consultancy and corporate training (INR in Lakhs):**  
42.80

### 3.9 Extension Activities

Factors like environment protection, health and hygiene, education for the masses are some of the factors that count for nation building which also happens to be a core value in Shoolini as well . Recently Shoolini has been ranked among top 200 globally in TIMES HIGHER EDUCATION IMPACT RANKINGS which captures its social initiatives. University on regular basis conducts activities with youwecan, Care n Shares , Indian association of muscular dystrophy , Swachh Bharat and Swachh Shoolini abhiyaan , Red cross, plantation drives etc. Campaigns on drug abuse are organized by Shoolini's trained volunteers who make an effort to combat the spreading menace of drugs and tobacco by street plays, counselling sessions and student interactions. All these initiatives have been a huge sensitizing factor for our students who now understand the challenges of the lesser privileged. Inculcating the right values in the youth is on high priority in our agenda. Letters of appreciation and recommendation (attached) convince us that we are enriching the lives not only of the community but our students as well. Jagriti is one of our best practice , our initiatives towards a better world.

### Awards received by its teachers and students

Sr. No.	Name of the activity	Name of the Award/ recognition	Name of the Awarding government/ government recognized bodies
1	Swachh Campus	Swachhta ranking 2020	MHRD, Govt. of India
2	Campaigns to restore the environment.	Letter of appreciation and association	Healing Himalayas
3	Cancer awareness	Letter of appreciation and association	YouWeCan
4	Book donation drive	Letter of appreciation and association	Mahadevi charitable trust
5	Contribution towards Covid- 19 relief	Letter of appreciation	Department of health and family welfare, H.P.
6	Contribution towards Covid- 19 relief	Letter of appreciation	Chief medical officer, Himachal Pradesh Department of Health and Family

			Welfare
7	Contribution towards Covid- 19 relief	Letter of appreciation	Dr Yashwant Singh Parmar Government Medical College & Hospital, Nahan

### 3.10 Extension and outreach programs conducted by the University

Sr. No	Name of the activity	Organizing unit	Name of the scheme	Number of students participated in such activities
1	A cleanathon with Healing Himalayas	Healing Himalayas	Swachh Bharat Abhiyaan	84
2	Online Session on Responsibilities of NSS	NSS Shoolini University	Social Welfare	50
3	National Integration Camp, Jaipur	Govt. of India and NSS	Social Welfare	2
4	Swachh Bharat Cleaning Campaign	NSS Shoolini with Healing Himalayas	Swachh Bharat Abhiyaan	84
5	Gandhi Jayanti- Online Poster Presentation Competition	NSS Shoolini University	Social Welfare	124
6	Virtual Painting Exhibition for a Cause	Goonj	Social Welfare	85
7	Calligraphy Workshop- A Charity Fund-Raiser	Goonj	Social Welfare	42
8	Slogan Writing- Pink October	YouWeCan	A fight against Cancer	166

9	A Guru Talk with Sarabjeet Singh on World Cancer Day	YouWeCan	A fight against Cancer	810
10	Cricket Tournament on World cancer day	YouWeCan	A fight against Cancer	33
11	Food Stalls for Fund raising- World Cancer Week	YouWeCan	A fight against Cancer	64
12	Zumba for a Cause- World Cancer Week	YouWeCan	A fight against Cancer	320
13	Musical Evening "Rock for a Cause"	Acoustic Himalayas	A fight against Cancer	620
14	Visit to Manav Mandir on International Happiness Day	IAMD	Indian Association of Muscular Dystrophy	22
15	Cultural Activity at Manav Mandir	IAMD	Indian Association of Muscular Dystrophy	26
16	Social Activity at Manav Mandir	IAMD	Indian Association of Muscular Dystrophy	24
17	Event at Mahadevi Library and Fund-Raising	Mahadevi Library	Social Welfare	480
18	World Grandparents Day Celebration	Shoolini University / Care & Share	World Grandparents Day	36
19	World Animal Day Celebration	Shoolini University / Akanksha Trust	Prevention of Animal Abuse	72
20	Let's Talk about Mental Health- By Mrs. Renu Thakur	Oorja- Temple of Healing	Initiative for mental health	162
21	A-z of being cancer smart	YouWeCan	A fight against	630



			Cancer	
22	A talk on overall health and hygiene on Women's Day	Sirona Hygiene	Health Awareness	60
23	"Can Survive – A Ray of Hope" A play on breast cancer on Women's Day	YouWeCan	Breast Cancer Awareness	420
24	YouWeCan bikers visit for "Mission 1000 Beds"	YouWeCan	Covid Prevention	24
25	Online education session for Mahadevi Library Students	Mahadevi Library / Shoolini University	Social Welfare	14
26	Contribution towards Covid-19 relief	Dr Yashwant Singh Parmar Government Medical College & Hospital, Nahan	Covid relief fund	2
27	Contribution towards Covid-19 relief	Chief medical officer, Himachal Pradesh Department of Health and Family Welfare	Covid relief fund	3
28	Contribution towards Covid-19 relief	Department of health and family welfare, H.P.	Covid relief fund	2

### 3.11 Functional MoUs in India and Abroad

S.no	Organization with which MoU is signed	Name of the institution	Duration	List the actual activities under each MOU year wise	Number of students/teachers participated
1	DCM Group of Schools	DCM Group of Schools	5 Years	Upgradation of academia partnership	Nil

2	FICCI Ladies Organisation	FICCI Ladies Organisation	3 Years	To provide nurturing, instructive and supportive environment to entrepreneurs	Nil
3	Microtek India	Microtek India	5 Years	Exchange of industry experts and faculty, internship and placement of students, Joint research and consultancy projects	Nil
4	Chandigarh Angel Network (CAN)	Chandigarh Angel Network (CAN)	5 Years	Upgradation of academia partnership, Joint incubation of ideas, Exchange of staff for training, Faculty development, Joint research, innovation, incubation consultancy and consultancy programs	Nil
5	Coursera	Coursera	5 Years	Skill Based Courses	650
6	M/S JKG Bio Science Pvt.Ltd, Delhi	M/S JKG Bio Science Pvt.Ltd, Delhi	5 Years	Upgradation of academia partnership, Joint incubation of ideas, Exchange of staff for training, Faculty development, Joint research, innovation, incubation and consultancy programs	Nil
7	Himachal Pradesh University, Shimla, H.P	Himachal Pradesh University, Shimla, H.P	5 Years	Joint research programs, exchange of academic information and materials, to encourage visits by faculty from both the institutions.	Nil
8	Newshound India Foundation & Department of Journalism & Mass Communication	Newshound India Foundation & Department of Journalism	5 Years	To provide media studies related education and facilities to students	About 100 students of BJMC and MA in Journalism participated in the

	n	m & Mass Communi cation			activites of Newshoun d
9	ICF Delhi NCR Chapter (Rajdhani Coaching Association)	ICF Delhi NCR Chapter (Rajdhani Coaching Associatio n)	1 Year	To organize a comprehensive coaching interventions for students and faculty members	Nil
10	Cankiri karatekin University	Cankiri karatekin University	5 Year s	Research Collaboration, Student exchange, Higher education, Faculty Exchange	Nil
11	Hradec Kralove	Hradec Kralove	5 Year s	Research Collaboration, Student exchange, Higher education, Faculty Exchange	Nil
12	Enat College	Enat College	5 Year s	Research Collaboration, Student exchange, Higher education, Faculty Exchange	Nil
13	Chang Gung University	Chang Gung University	5 Year s	Research Collaboration, Student exchange, Higher education, Faculty Exchange	Nil
14	Info Link College	Info Link College	5 Year s	Research Collaboration, Student exchange, Higher education, Faculty Exchange	Nil

## **CHAPTER- IV**

### **INFRASTRUCTURE AND LEARNING RESOURCES**

#### **4.1 Physical Facilities:**

University's infrastructure compares favorably with the best in the world. The facilities for teaching- learning include:

- 40 Lecture and Seminar Halls, 13 e-studios, 10+ Conference Rooms and 80+ state of the Art Research Labs all ICT enabled.
- Yogananda Knowledge Centre (Central Library, open 24x7) fully digitized, houses books & journals and e-resources through LMS and KMS, subscription to EBSCO with more than 2.0 lakh e-books and 10,000 research journals. A language lab and eUniv studio.
- Through eUniv platform, Online Education supported by the LMS Moodle. Lectures, Videos are uploaded online for synchronous and asynchronous learning. For efforts in IT field, University awarded the QS IGAUGE's E-LEAD certification
- An in-house radio and news channel called Radio Shoolini. Shoolini TV run by department of Journalism and Mass communication, bringing out regular newsletters and video news bulletins.
- Practical training in Hotel management, given to students by School of Hospitality and Hotel Management through the various guest houses of the university.
- Research in the fields of Yoga and Naturopathy, carried at its unique Yogananda Ville comprising an international hostel, meditation hall & huts & academic block. Constructed on eco-friendly lines, the Ville provides an ethnic experience with contemporary facilities.

#### **4.2 Facilities for cultural activities and sports**

All-round development of students and that learning happens not just in classroom but also in the sports field, auditoria, and other non-academic activity hubs.

- Milkha Singh sports complex, has three badminton courts, table tennis area, gym-plus-cardio facility with changing rooms and lockers. The outdoor facilities have Basketball ground, Cricket practice pitch, Badminton courts and the Yuvraj Singh Stadium for football, cricket, and other outdoor games.
- Department of Yoga and Naturopathy, and Yogananda Ville with pine-wooded and mud huts where Naturopathy treatment, training and Detoxification practices are provided.
- Hiking and trekking facilities exist abundantly. University is located on a pine-covered hill with walking trails crisscrossing in all directions.

- Cultural Activities are a crucial part. In the Activity Centre dance and aerobic classes are held. Cineplex offers high-quality audio and visual experience. Open-Air Theatre, three auditoriums, and a multipurpose theatre allocated for sociocultural activities. Two annual cultural festivals organized by the university are Manchantra and Moksh.
- A Club Mela is organized where students are introduced to the various clubs in campus. SPRINT, the university's unique programme, organizes regular student activities.
- Social projects are mandatory for all students. Nearby villages are frequently visited by our NSS, NCC cadets and volunteers.

### 4.3 General Campus Facilities and Overall Ambience

Facilities available on campus are of high standard and contribute to the overall ambience:

- The administrative Block has offices of Chancellor, VC, Registrar, Director Operations, Controller of Examinations, IQAC, Accounts, HR, Placement and Conference Rooms.
- Health Centre: Four-bed hospital on campus with one doctor, two nurses, ambulance, and lab facilities.
- Seven State-of-the-art hostels, separate for boys and girls, provide residential students all amenities, run professionally by "New Doors" agency.
- Accommodation and Guest Rooms: Hospitality department runs Daffodil's guest house, Yogananda Ville and Hotel Chalet
- Sports and cultural facilities on campus are abundant: Yuvraj Stadium, Milkha Singh Indoor Sports Complex, outdoor Badminton and Basketball Courts and Cricket Practice Pitch. Open- Air theatre, Student Activity Centre with Cineplex, Dance studio, Music room.
- Seven cafeterias serving a range of different menus catering to the palate preferences of students.
- Environmentally friendly measures are taken for harnessing solar energy and rainwater. There is a regular supply of electricity through generators
- Strong IT facilities. Shoolini has the distinction of being awarded QS IGAUGE's E-LEAD certification (E-learning Excellence for Academic Digitization). The campus is fully Wi-Fi enabled with 1 GBPS of LAN connectivity, fully functional e-studios

Individuals with special needs. Campus is disabled friendly. Golf carts are available. A stair wheelchair and ramps for access to buildings.

#### 4.4 Total expenditure for infrastructure: 315.7

<b>Budget allocated</b>	<b>Expenditure</b>	<b>Total expenditure</b>	<b>Expenditure on maintenance of academic facilities</b>	<b>Expenditure on maintenance of physical facilities</b>
424.00	315.70	1840.06	47.23	77.47

#### 4.5 Library as a Learning Resource

<b>Particulars</b>	<b>F.Y. 2020- 21</b>
Library Books	3.16
Library Journal	13.29
e – journals	-
e-books	13.47
e-ShodhSindhu	-
Shodhganga	-
Databases ( E resources)	23.53
<b>TOTAL</b>	<b>3.45</b>

#### 4.6 Annual expenditure for Learning Resources: 53.45

<b>Particulars</b>	<b>F.Y. 2020-21</b>
Library Books	3.16
Library Journal	13.29
e – journals	-
e-books	13.47
e-ShodhSindhu	-
Shodhganga	-
Databases ( E resources)	23.53
<b>TOTAL</b>	<b>53.45</b>

#### 4.7 Number of usages of library by teachers and students per day: 182.07

#### 4.8 IT Infrastructure

a) Number of classrooms and seminar halls with ICT - enabled facilities:

53

Sr. No.	Room number			Type of ICT facility
	Academic Block	Room No.	Name of Classroom/ Seminar Hall	
1	A	302	Abhimanyu	Wi-fi/LAN, Audio-Video Facility
2	A	301	Harishchandra	Wi-fi/LAN, Audio-Video Facility
3	B	101	Peter Drucker Hall (PDH)	Wi-fi/LAN, Audio-Video Facility
4	C	202	Vishwamitra	Wi-fi/LAN, Audio-Video Facility
5	C	303	Baji Rao	Wi-fi/LAN, Audio-Video Facility
6	C	301	Vikramaditya	Wi-fi/LAN, Audio-Video Facility
7	C	501	Sudarshan	Wi-fi/LAN, Audio-Video Facility
8	C	402	Ratan Tata Hall (RTH)	Wi-fi/LAN, Audio-Video Facility
9	D	105	Kanishka	Wi-fi/LAN, Audio-Video Facility
10	D	106	NR Rao	Wi-fi/LAN, Audio-Video Facility
11	D	203	Raja Chola	Wi-fi/LAN, Audio-Video Facility
12	D	304	Swaminathan	Wi-fi/LAN, Audio-Video Facility
13	D	306	Aurobindo	Wi-fi/LAN, Audio-Video Facility
14	D	204	Valmiki	Wi-fi/LAN, Audio-Video Facility
15	E	301	Shanti Swaroop	Wi-fi/LAN, Audio-Video Facility
16	E	303A	Rana Sanga	Wi-fi/LAN, Audio-Video Facility
17	E	303B	Vyasa	Wi-fi/LAN, Audio-

				Video Facility
18	E	102	Visvesvarya Hall	Wi-fi/LAN, Audio-Video Facility
19	F	101	Samudra Gupta	Wi-fi/LAN, Audio-Video Facility
20	F	102	Akbar	Wi-fi/LAN, Audio-Video Facility
21	F	103	Birbal	Wi-fi/LAN, Audio-Video Facility
22	F	104	Savarkar	Wi-fi/LAN, Audio-Video Facility
23	G	302	Kabir	Wi-fi/LAN, Audio-Video Facility
24	G	403	Udham Singh	Wi-fi/LAN, Audio-Video Facility
25	G	502	Laxmi Bai	Wi-fi/LAN, Audio-Video Facility
26	G	503	Meera	Wi-fi/LAN, Audio-Video Facility
27	G	504	Tulsidas	Wi-fi/LAN, Audio-Video Facility
28	G	304	PN Mehra	Wi-fi/LAN, Audio-Video Facility
29	G	701	Steve Jobs Lecture Hall	Wi-fi/LAN, Audio-Video Facility
30	G	702	Tagore	Wi-fi/LAN, Audio-Video Facility
31	G	703	Ramanna	Wi-fi/LAN, Audio-Video Facility
32	G	800	APJ Hall	Wi-fi/LAN, Audio-Video Facility
33	H	402	Rahim	Wi-fi/LAN, Audio-Video Facility
34	H	502	Kalidas	Wi-fi/LAN, Audio-Video Facility
35	H	503	Chanakya	Wi-fi/LAN, Audio-Video Facility
36	H	701L	Chandara Gupta	Wi-fi/LAN, Audio-Video Facility
37	H	800	Moot Court Hall	Wi-fi/LAN, Audio-Video Facility



38	H	401	Dhyan Chand	Wi-fi/LAN, Audio-Video Facility
40	Alongside Girls Hostel	201	Cineplex	Wi-fi/LAN, Audio-Video Facility
41	Alongside Aryabhata Hostel	7	Chalet	Wi-fi/LAN, Audio-Video Facility
42	A	Bhaskara	E-Studio	Wi-fi/LAN, Audio-Video Facility
43	A	Darwin	E-Studio	Wi-fi/LAN, Audio-Video Facility
44	A	H J Bhabha	E-Studio	Wi-fi/LAN, Audio-Video Facility
45	C	YS Parmar	E-Studio	Wi-fi/LAN, Audio-Video Facility
46	G	501	E-Studio	Wi-fi/LAN, Audio-Video Facility
47	G	Panini	E-Studio	Wi-fi/LAN, Audio-Video Facility
48	G	Vashishtha	E-Studio	Wi-fi/LAN, Audio-Video Facility
49	H	Chanakya	E-Studio	Wi-fi/LAN, Audio-Video Facility
50	H	Charaka	E-Studio	Wi-fi/LAN, Audio-Video Facility
51	H	Dhawan	E-Studio	Wi-fi/LAN, Audio-Video Facility
52	YKC1	Yogananda Knowledge Center (YKC)	E-Studio	Wi-fi/LAN, Audio-Video Facility
53	YKC2	Yogananda Knowledge Center (YKC)	E-Studio	Wi-fi/LAN, Audio-Video Facility

The University has well-documented IT policy for ensuring appropriate availability, management of IT assets and protection of their confidentiality and integrity.

These policies are:

- IT/Hardware Installation Policy

- Software Installation-Licensing Policy
- Network Use Policy
- E-mail Account Use Policy
- Website Hosting Policy
- University Database Use Policy

University-wide strategies are established, and responsibilities demarcated for protecting the Confidentiality, Integrity, and Availability of the information assets. Information assets addressed by policy include data, information systems, computers, network devices, intellectual property, as well as documents and verbally communicated information. The University has redundancy and back-up policy. The University proactively upgrades its facilities .IT policy is updated on regular basis to ensure e-learning and enabled continue academic. The University was awarded QS-IGAUGE's, E-LEAD certification. Expenditure on IT installation and maintenance on campus over the last five years has been Rs.414.52 lakhs. Budgeting is done on the assessment of IT-related requirements on annual basis. The budget allocated for IT expenses was Rs.422.9 lakhs, for ensuring 100% connectivity in campus, and moving towards paperless functioning. The IT Department has been given the responsibility of running secure university's network by installing firewalls-virus checking, access- controlling and content-filtering software at gateway. University maintains a Wi-fi/Internet from BSNL with 1Gbps bandwidth

**b) Student - Computer ratio**

**Number of students:** 3729

**Number of Computers for academic purposes:** 549

**c) Available bandwidth of internet connection: ≥1 GBPS**

**4.9 Maintenance of Campus Infrastructure**

**Total expenditure incurred on maintenance of physical facilities and academic support facilities:** 124.70

<b>Budget allocated</b>	<b>Expenditure</b>	<b>Total expenditure</b>	<b>Expenditure on maintenance of academic facilities resources)</b>	<b>Expenditure on maintenance of physical facilities resources)</b>
424.00	315.70	1840.06	47.23	77.47

University has dedicated team under Director Operations and Director Estate overseeing maintenance:

- Infrastructure and Equipment: Maintenance is under Director Estate. Power supply monitored continuously with regular audits. Water received from PHC source and own water bores. Maintenance of Labs and lecture halls under respective in-charge, supported by Operations and Estate teams.
- Day-to-day maintenance and checks are routine. Maintenance of 3M water filtration, Firefighting equipment, STP, ETP, water pumps, specialized equipment in labs, etc. outsourced to authorized agencies.
- Sports: University has both indoor and outdoor sports facilities maintained by sports officer and his team.
- Transport: Fleet of 10 buses, eight cars, two Ambulance and three E carts maintained through outsourced agencies.
- Clean and Green campus: Team of housekeeping and landscape work with dedication to keep campus aesthetically beautiful. Deep cleaning of campus carried out fortnightly. Dustbins placed at every corner and corridors emptied regularly. Segregation of refuse including from labs and their proper disposal through private contractor.
- Security and Surveillance: Trained Security guards deployed, and surveillance cameras installed at all sensitive areas maintained by IT Team.
- Teaching Aids: All teaching aids such as LCD Projectors, PA Systems, Laptops, Desktops, Printers, Wi-Fi etc periodically checked and maintained by Estate and IT Team.

**CHAPTER – V**  
**STUDENT SUPPORT AND PROGRESSION**

**5.1 Student Support**

**a) Students benefited by scholarships and free ships: 799**

**Number of students benefited by Government scheme**

<b>Name of the scheme</b>	<b>Number of students</b>	<b>Amount</b>
Post Matric Scholarship for OBC Students (H.P)	1	65650
Post Matric Scholarship for SC Students (H.P)	1	70000
Kalpana Chawla Chatravriti Yojana(H.P)	1	15000
Umbrella Scheme for Education of ST (children-Post metric Scholarship (PMS) for ST Students)	4	174100
Post Metric Scholarship for ST Students_Manipur	2	61400
Post Metric Scholarship for Minorities CS	1	8000

**Number of students benefited by the University schemes**

<b>Name of the scheme</b>	<b>Number of students</b>	<b>Amount</b>
Students benefited by the institution's schemes	766	24458072.95

**Number of students benefited by the non-government agencies (NGOs)**

<b>Name of the NGO/agency</b>	<b>Number of students</b>	<b>Amount</b>
University of Naples, Italy	4	2,32,500
Purukul Scholarship	19	2086866

**b) Total number of students benefited by career counselling: 3020**

## 5.2 Student Progression

- Students qualifying in state/ national/ international level examinations: 9
- Total number of placements of outgoing students during the year: 322
- Number of recently graduated students who have progressed to higher education: 153

## 5.3 Student Participation and Activities

### a) Number of awards/medals won by students for outstanding performance: 4

Name of the award/ medal	Inter-university / state / National / International	Name of the event	Name of the student
State level open individual online yogasana sport championship	State	Himachal Pradesh Yogasana Association	Dixit
State level open individual online yogasana sport championship	State	Himachal Pradesh Yogasana Association	Nitika
National Individual Yogasana Sports Championship	National	National Yogasana Sports Federation	Dixit
National Individual Yogasana Sports Championship	National	National Yogasana Sports Federation	Nitika

### b) Number of sports and cultural events / competitions organized: 38

Sr. No.	Date of event/competition (DD-MM-YYYY)	Name of the event/competition
1	12-08-2020	Virtual Open Mic
2	23-08-2020	Photography Contest
3	01-09-2020	e- Induction
4	02-09-2020	Bollywood Dancing Fitness Regime
5	03-09-2020	Fresh talent competition
6	03-09-2020	Virtual Meet and Greet
7	08-09-2020	Theater Workshop
8	13-09-2020	Grandparents Day Celebration
9	14-09-2020	Hindi Diwas
10	19-09-2020	Tansen ki Khoj

11	25-09-2020	Naati workshop
12	29-09-2020	World Heart Day
13	02-10-2020	Gandhi Jayanti Celebration
14	04-10-2020	World Animal Day
15	09-10-2020	Music Fest
16	12-10-2020	Voice and Speech Workshop
17	23-10-2020	Awareness on Breast Cancer
18	05-11-2020	E Manchantra
19	12-01-2021	National Youth Day celebration
20	21-01-2021	Statehood Day
21	22-01-2021	Salsa workshop
22	26-01-2021	Republic Day Celebration
23	03-02-2021	MBA 1 <sup>st</sup> year Cultural
24	06-02-2021	World Cancer Day
25	07-02-2021	Musical Evening
26	12-02-2021	MBA Final year Cultural
27	18-02-2021	Purna Diwas Celebration
28	05-03-2021	Cultural -Final Year Engineering Students
29	08-03-2021	Theatre Workshop
30	20-03-2021	World Happiness Day
31	20-03-2021	Photography Competition
32	02-04-2021	Poetry and Story Telling Competition
33	02-04-2021	Book Mark Competition
34	15-04-2021	Himachal Day
35	22-04-2021	Prithvi Diwas
36	29-04-2021	International Dance Day
37	15-05-2021	International Day of Families
38	09-09-2020	Theatre Workshop

#### 5.4 Alumni Engagement

Shoolini University signed an MOU with Alma Shines, an Alumni Networking Company on September 6, 2019. Alma Shines helps Shoolini University to streamline Alumni management to build a robust and ever-growing alumni community. There are over 2743 strong alumni members registered with the Shoolini Alumni Association.

Alumni meets: The Alumni association organizes regular interaction of alumni from different locations to share their experience and learning curves with each other. Due to restrictions imposed during Covid -19 outbreaks only virtual meets were organized. These meets are coordinated and executed by the association.

## CHAPTER – VI

### ACADEMIC ASPECTS

#### 6.1 Curriculum Design and Development

Keeping abreast of the latest technological, industrial, social, local, regional, and global developments, all programs in the University are continuously upgraded and updated. Curricula ensure that students get trained in the latest technologies, learn life skills such as problem- solving, communication, leadership, teamwork and remain employable. Owing to COVID-19 pandemic, the pedagogy of imparting knowledge, skills and attitudes took a paradigm shift when it mostly became online rather than offline. Along with university wide LMS, various MOOC platforms were incorporated into the system.

#### **Shoolini follows an extensive 360-degree process for curriculum review:**

1. Benchmarking of programs with reputed institutions.
2. Inter-disciplinary approaches for critical and collective understanding.
3. Industry-Alumni Feedback to assess industry relevance. Partnered with GENPACT etc.
4. Board of Studies and Global Advisory Board provide expert external perspective.
5. Guidelines of statutory bodies, provides larger strategic view.
6. Mandatory SPRINT Program aims for an all-round development of students.
7. Yogananda Guru Series- inspires students to contribute towards national development.
8. Skill Certifications like (AMFI-NISM), TALLY, etc.
9. Research leading to filing of Patents and Publications
10. Regional responsibilities focus on utilization and conservation of the Himalayan resources.
11. Exchange Programmes: Exchange of teachers and students through MoUs with international institutes/ universities.

#### 6.2 Name of the Programmes where syllabus revision was carried out

Sr. No.	Programme Code	Programme Name	Year of Introduction
1	SUBTCE01	B.Tech . Civil Engineering	2011- 2012
2	SUBTEE01	B. Tech EE	2012- 2013
3	SUBTME01	B.Tech Mechanical	2010-2011
4	SUBTECE01	B.Tech ECE	2010-2011
5	SUMTECE01	M Tech. ECE	2013-14
6	SUMTCE01	M Tech. Civil	2012-13
7	SUMTME01	M Tech Mechanical Engineering	2013-14
8	SUBTCSE01	B Tech CSE	2009-10

9	SUMTCSE01	MTech CSE	2012-13
10	SUBTI T01	BTech IT	2017-18
11	SUBS MAT01	BSc (Hons) Mathematics	2016-17
12	SUMS MAT01	MSc Mathematics	2016-17
13	SUPH DCSE0 1	PhD CSE	2015-16
14	SUPH DMAT 01	PhD Mathematics	2018-19
15	SUMS DAT01	MSc Data Analytics	2020-21
16	SUBC A01	BCA	2020-21
17	SUSU MSBIT 01	MSc Botany	2011-12
18	SUMS ZLG01	MSc Zoology	2015-16
19	SUMS ENV01	MSc Env Sciences	2010-11
20	SUBSB OT01	BSc (Hons) Botany	2015-16
21	SUBSZ LG01	BSc (Hons) Zoology	2015-16
22	SUPH DBOT0 1	PhD Botany	2009-10
23	SUPH DZLG0 1	PhD Zoology	2009-10
24	SUPH DENV 01	PhD Env Sc	2011-12
25	SUBSP HY01	BSc (Hons) Physics	2015-16
26	SUBTB T01	BTech Biotechnology	2009-10
27	SUBTF T01	BTech Food Technology	2010-11
28	SUBSF T01	BSc (Hons) Food Technology	2016-17
29	SUBSN D01	BSc Nutrition and Dietetics	2020-21
30	SUMS FT01	MSc Food Technology	2014-15
31	SUMT FT01	MTech Food Technology	2014-15
32	SUMS ND01	MSc Nutrition and Dietetics	2020-21
33	SUPH DFT01	PhD Food Technology	2014-15
34	SUBSB T01	BSc (Hons) Biotechnology	2014-15
35	SUBS MIC01	BSc (Hons) Microbiology	2014-15
36	SUMS BT01	MSc Biotechnology	2009-10
37	SUMS MIC01	MSc Microbiology	2009-10
38	SUPH DBT01	PhD Biotechnology	2009-10
39	SUPH DMIC0 1	PhD Microbiology	2009-10
40	SUMT BT01	MTech Biotechnology	2010-11
41	SUBC OM01	B Com (Hons)	2010-11
42	SUBSY OG01	BSc Yoga	2017-18
43	SUBA ECON0 1	BA (Hons) Economics	2015-16
44	SUBA ENG01	BA (Hons) English	2016-17
45	SUBAJ MC01	BA Journalism and Mass Communication	2016-17
46	SUBB A01	BBA	2014-15
47	SUMB A01	MBA	2009-10
48	SUMM AECO0 1	MA Economics	2020-21



**6.3 Total number of courses having focus on employability/ entrepreneurship/ skill development: 423**

**6.4 Academic Flexibility**

- **New courses introduced across all programs offered during the year: 98**
- **Number of Programmes in which Choice Based Credit System has been implemented during the year: 59**

**6.5 Curriculum Enrichment**

As a socially responsible university, Shoolini University has embedded high-impact and need-of-the-hour relevant courses in areas such as Professional Ethics, Gender, Human Values, Environment and Sustainability

1. Yogananda Guru Lecture Series: Guest lectures by field experts, researchers, corporate leaders, spiritual gurus, and luminaries to instil social, moral and ethical values among the students.
2. Courses on Human Values, Spirituality & Meditation, and Business Ethics like Spirituality and Meditation, Bhartiya Sanskriti, Ancient Indian Wisdom, Indian Mythology, Society & Culture of India, Values & Ethics etc get floated
3. Social Projects on Health, Sanitation, Cancer, Muscular Dystrophy, Environment, Plastic, solid liquid waste etc., happen to sensitize people.
4. Courses such as Core Social Challenges & Their Resolutions, Literature, Gender, NSS, NCC etc are offered to develop the students' sensibility towards biological, sociological, psychological, and legal aspects of gender equality etc.
5. Environment and Sustainability issues are well-reflected in university's 'Green Policy' carried out by Center for Research on Himalayan Sustainability and Development and Center in Renewable Energy
6. Courses like Himalayan Biodiversity, Drug Abuse, Green Chemistry, Environmental Laws, Green & Clean Energy, Yoga for Wellness, Spirituality & Meditation, Mantras of Happiness, Environmental Studies etc focus to make students better citizens of tomorrow.

**6.6 Number of value-added courses for imparting transferable and life skills: 40**

## CHAPTER VII

### INSTITUTIONAL VALUES

#### 7.1 Institutional Values and Social Responsibilities

An Open Elective course on 'Gender Studies' is offered to all UG students - identify/understand the key issues related to gender bias/inequality.

Gender Sensitivity Through Group Activities takes place regularly; this helps redefine the students' perspective towards the other sex. Discussions around menstruation, unprotected sex, child abuse, AIDS, etc., are carried out on common platforms. LGBTQ + Community club launched "Shades of Love" Guest Faculty and Expert lectures are an ongoing activity at Shoolini through 'Guru Series' lectures.

#### Special Facilities for Women Employees

- Creche is fully furnished and has arrangements for food, recreation, and beds for the children. A teacher and trained nanny are available full day.
- Security: Security Arrangements for Women Residents in all the hostels. Residences of girl students are manned by lady security guards. There are also lady attendants who accompany women employees and students.
- Health: Free Health camps and check-ups are organized regularly for the faculty and staff. Doctors from leading hospitals are engaged for these activities
- Physical and Other Activities. Yoga, Aerobics, Dance, Music, Theater Classes are conducted regularly in the evening hours
- Counselling. A lady counsellor is available 24x7 on campus in case students or staff have any issues bothering them.

#### 7.2 Facilities for alternate sources of energy:

- **Solar energy**
- **Biogas plant**
- **Wheeling to the Grid**
- **Sensor-based energy conservation**
- **Use of LED bulbs/ power efficient equipment**

#### 7.3 Facilities for waste management

- a. **Solid Waste Management:** Accomplished either by in house utilization/ consumption or outsourcing collection and disposal to an authorised agency. Over 700 bins have been provided on campus.
- b. **Biodegradable Solid Waste:** Collected and put through Vermicompost process. Takes 60 days to convert into Vermicompost used in nurseries,

agriculture farms, and research purposes.

c. **Non – Biodegradable Solid Waste:** Collection and disposal outsourced to authorised agency for disposal to the dumping yard situated at Salogra.

d. **Liquid Waste Management**

- Sewerage Treatment Plant (STP): 2 Sewage Treatment Plants of 350 & 50 Kilo Litre capacity, respectively. Treated water is then used for irrigation of landscaping and gardening projects.
- Effluent Treatment Plant (ETP): 20,000 Litre capacity, is designed to treat the effluent coming from chemical sources and labs. Treated water is then used for landscaping and gardening purposes.

e. **Biomedical Waste Management**

Contracted with Enviro Engineers, Shimla, authorized by H.P. State Pollution Control Board for disposal of Biowaste up to 100 kg per month at their plant at Sandli/Pirdi.

f. **Waste Recycling System**

The University has adopted a minimum and essential use of paper policy which helps in the conservation of resources and a small amount of paper is wasted.

#### 7.4 Water conservation facilities

1. Rainwater harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Wastewater recycling
5. Maintenance of water bodies and distribution system in the campus

#### 7.5 Green campus initiatives

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered vehicles
3. Pedestrian-friendly pathways
4. Ban on use of plastic
5. Landscaping

#### 7.6 National and international commemorative days, events and festivals.

The following are some of the significant days in the academic calendar that are celebrated annually with great fervor and energy

1. Republic Day (26th Jan) and Independence Day (15th August)
2. World Cancer Day (4th Feb) faculty /students take up the issue for one day but full week is devoted to spread of awareness.
3. Women's Day Interaction with eminent women, visits to interact with women of neighbouring villages, fashion shows, awareness of women's rights, etc., are all organized to celebrate Women's Day
4. World Health Day Free medical check-ups, talk by eminent doctors Our girl

students visit girls' schools and discuss menstrual hygiene and general awareness of their physical and mental wellbeing

5. World Labor Day (1st May) is celebrated by appreciating all the workforce in campus.
6. Teachers Day (5th September) is celebrated by organizing a mini marathon on different social themes.
7. Swachhta Diwas (2nd October) is celebrated with a cleanliness drive in campus and in the villages nearby.
8. Pink Oct for breast cancer other commemorative days like World Theatre Day when the theatre club 'Dramebaaz' organizes workshops and performances. On days like World Science Day, Christmas, Daan Utsav, World Yoga Day, Environment Day, World AIDS Day, Say No to Tobacco Day.

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