

FOR 1st CYCLE OF ACCREDITATION

SHIV NADAR UNIVERSITY

NH-91, TEHSIL-DADRI, GAUTAM BUDDHA NAGAR, UTTAR PRADESH 201314 www.snu.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

February 2019

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Shiv Nadar University (SNU) was established in 2011, under an Act of the State of Uttar Pradesh, by the Shiv Nadar Foundation (SNF), a philanthropic organization founded by Mr. Shiv Nadar, Founder and Chairman of HCL, one of India's largest and most successful Information Technology groups, and the Chairman of the Shiv Nadar Foundation. The Foundation is committed to creation of a more equitable, meritocracy-based society by empowering individuals to bridge the socio?economic divide, primarily through the creation of educational institutions, which would outlast its Founder and provide meritorious students from all walks of life, the opportunity to receive world-class education.

SNU is designed as a comprehensive, multi-disciplinary, student-centric, research-focused university and was founded with the aim of creating a world-class institution of higher education in India that is comparable in academic excellence to the best internationally recognized universities. SNF has invested close to Rs. 2,000 Crores for creation of a truly world class academic and support infrastructure for the university. The vision and purpose of the university have been able to attract faculty from some of the finest institutions in India and in the world such as MIT, Cambridge, Oxford, University of California Berkeley, University of Chicago, IISc, IITs and IIMs etc.

In its short existence of 7 years, the university has achieved many accolades:

- The University has been selected for "**Institution of Eminence**" by the MHRD appointed Empowered Expert Committee
- The **UGC Inspection Report** on the University (available at https://www.ugc.ac.in/pdfnews/4993819_ShivNadarUniversity-Anx-II.pdf) is exceptionally encouraging, and the detailed testimony covered all the aspects of functioning of the University.
- NIRF Rankings 2018 the University is the youngest to feature in the 'top 50' amongst all the Indian universities
- The **University of the Year Award 2016** (Less than 10 years of existence) by FICCI (Federation of Indian Chamber of Commerce and Industry)
- **Atal Incubation Center** SNU was one of the first 10 institutions to receive this prestigious grant from Niti Aayog from amongst more than 3600 applicants.
- All the Departments in the School of Natural Sciences (Mathematics, Chemistry, Life Sciences and Physics) have earned the prestigious DST-FIST grant.

Vision

To empower individuals and communities to realize and exercise universal freedom through acquisition and application of knowledge by:

- Dedicating to the development, organization, preservation, dissemination, and application of knowledge in a wide range of fields of study
- Committing to excellence in teaching, discovery & innovation, scholarship, and service to expand the scope of human understanding, and contributing to the betterment of the world

• Pledging to serve the higher education needs of India, and the global community.

Mission

A comprehensive, multidisciplinary, research-focused, and student-centric university aimed at becoming a leading international institution of higher learning by:

- Developing and educating the path-shapers of tomorrow, who can shoulder the challenges of globally responsible, and ethical leadership in the 21st Century
- Supporting research, scholarly, and creative endeavors that contribute to the creation of new knowledge at the frontiers of specialized areas as well as at the interface of diverse disciplines
- Evolving research and teaching programs that tackle the most pressing problems of the State of Uttar Pradesh, India, and the global community.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- The university has been recently recommended for Institution of Eminence Status by the MHRD appointed expert committee.
- During a short span of its existence, SNU has established itself as an upcoming and promising university with a focus on a globally competitive brand value.
- It has developed a unique multi-disciplinary curriculum at the undergraduate level that provides students with a well-rounded education by synthesizing broad, and strong multidisciplinary foundation coupled with a strong pedagogy.
- The University curriculum lays emphasis on research, experiential and applied learning as well as values, ethics, and service learning opportunities.
- The university also provides a great flexibility to students to explore academic pursuits outside their major also allows change of major based on their interests and abilities. This is a very good example of Choice Based Credit System of the UGC.
- The university's research programs are contemporary and in frontiers areas of research. Faculty have been recruited carefully in chosen areas based on their expertise, post-doctoral or industrial experience.
- Center of Excellence The University has a concept of virtual research centers which draw expertise from different departments.
- The campus is adequately spaced and expansion plans are also underway in order to create new academic buildings and quarters and sports facilities, including bio-diversity park.
- The University has a very strong faculty recruitment policy. More than 90% of the faculty members have study/work experience with top 500 universities in the world, with many of them having worked with top 10 universities in the world.
- The Source Normalized Impact per paper Parameter for the university is very good at 0.91 which is comparable to institute like IISc and IITs which are at 0.89 and 0.87 respectively.
- The University has citations per publication of 5.06 and percentages of papers in top quartile is 24.1% as per NIRF 2018 (Scopus). These numbers are comparable to IISc Bangalore that has the values of 5.42 and 28.87% respectively.
- Even in the short span of 7 years since inception, SNU has been able to rank among the best in India (48th among the Universities in India and the youngest in the Top 100).

Institutional Weakness

Peer perception and Academic/Research Reputation – As the University is new, the brand recall among the peers and across University is comparatively low. The University is working on a revitalized branding and promotion plan to promote itself by organizing events, seminars, school workshops on National and international level etc. which would help in strengthening the brand image and recall.

Institutional Opportunity

- India is one of the world's youngest nations on account of its demographic dividend. There is a great opportunity for a world-class institution to cater to the national needs and initiatives of providing quality education.
- The Gross Enrollment Ratio (GER) in India, which is around 25% as of today, is likely to become 50% over next 15-20 years. This would lead to an addition of about 30 Million learners to the higher educational institutions. This significant demand for quality higher education is a great opportunity for quality higher educational institutions.
- Lack of quality higher education has resulted into a significant brain and forex drain that has an adverse impact on the national economy. As per recent reports, the outgoing forex amount that is spent by Indian students going for study abroad is pegged at \$7 Billion. A world-class, top ranked university in global rankings is likely to lower this drain of human and forex resources.
- By global standards, Indian higher educational institutions should have 20-30% of their respective student body as foreign students. This number as per todays outlay should be in the range of 8-10 Million. However, unfortunately, India has not become a global destination for foreign students for various reasons thus far, having only around 50,000 international students as of today.
- With a buoyant economy and changing world order, India is going to become a global superpower in next few years, thriving on its flourishing democracy, diversity, inclusivity, and intrinsic human values. Even if we take a conservative estimate and peg the number of international students at 10% of GER, it becomes about 5 Million students in year 2035 contributing approx. Rs. 5 Trillion (Approx. USD 30 Billion) in absolute terms (assuming that a foreign student would spend Rs. 5 Lacs/year). This is a great opportunity for world-class universities to attract the global talent as Nalanda and Taxila were doing 2500 years ago.

Institutional Challenge

- Lack of a robust research and innovation ecosystem in India limits Indian institutions' ability to attract global talent among their faculty cadres.
- Other institutions from across the world especially those from BRICS and Europe are actively hiring from global talent pool and working to feature among top 500 institutions in the global rankings and therefore the competition for SNU is going to increase over next 10-15 years. This may shift the present goalpost after 10 years and to enter the top 500 rank may require additional efforts, resources and appropriate mid-trajectory corrections.
- Teaching Experience and Faculty Development programs The average age of teaching faculty at the university is around 36 years and therefore many of them do not have a significant teaching experience despite having strong research and publication records. This demands that the university focuses on imparting continuous training on pedagogy for an effective academic delivery in the classroom and

improved learning outcomes and satisfaction levels among the students. This is being instituted through Faculty Development Center which is providing a peer review mechanism by means of internal as well as external workshops. The extant technology is also being leveraged, such as lecture capture devices, to help faculty members watch their own lectures later and improvise the areas of concern with the help of senior colleagues.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Shiv Nadar University is designed as a comprehensive, multidisciplinary, research-focused, and student-centric university. SNU offers a full range of general and professional degree programs from the Bachelors to the Doctoral level in the schools of Engineering; Natural Sciences; Humanities and Social Sciences; Management & Entrepreneurship; and Extended Education and Professional Development.

The University has developed a Multidisciplinary and Interdisciplinary curriculum that is **fully aligned** with its stated vision and mission. It consists of a **common core** of undergraduate courses, and a flexibility to allow students to choose **multiple electives** for enhanced **breadth** of learning and engagement, together with acquiring **depth** in a Major subject. The Choice Based Credit System based flexible curriculum allows learners to progress at their own path and pace.

Every student is required to fulfil Research, Experiential and Applied Learning (REAL); Values, Ethics, Leadership, and Service (VELS); and Global and International Studies (GIS) credit requirements to graduate. The curriculum also integrates Experiential and Service Learning through work and service opportunities including research projects; design projects; practicums; cooperative education; service learning programs; internships; study abroad and cultural immersion programs. The curriculum not only emphasizes market-readiness among the students by offering domain specializations in tune with the needs of industries or frontier research but also focuses on key-skills such as critical thinking, interpretive and problem-solving skills, scientific exploration and normative principles into students' world-view to prepare students for future challenges of a complex, changing, and unpredictable world.

Each program at the University is designed through an extensive consultation mechanism with internal and external academic experts and leading researchers from India and abroad, industry leaders, policy makers, and is reviewed regularly through a robust feedback mechanism from different stakeholders.

Academic Council and Board of Studies periodically review and update the curriculum based on the feedback received from all the stakeholders such as students, faculty, alumni, parents, and employers, and all the programs have been revised during last five years.

Teaching-learning and Evaluation

Student Enrolment and Profile and Diversity

- The admissions process at the university is transparent and completely online.
- The university follows a merit-based/need-blind system to admit the most talented students from the applicant pool.

- All admitted students are supported by the Shiv Nadar Foundation by scholarships and/or stipends. The scholarships disbursed in last 5 years are more than Rs. 100 crores.
- University has students from 28 States/UTs and many foreign countries
- The average class 12th marks of all undergraduates at SNU is over 90%
- The university also offers handsome financial support, one of the highest in the country, to attract and retain best Ph.D. students.
- Student to faculty ratio is about 10:1

Faculty Profile and Teaching - Learning Process

- Percentage of faculty with PhD degree: 85%
- Faculty with study/working/training experience at world's top 500 universities: more than 90%.
- Percentage of faculty members using ICT tools: 100%
- Faculty members have been awarded with prestigious awards such as Fulbright Fellowship, DBT Innovative Young Biotechnologist Award, INSA Medal for Young Scientists, INSA Aryabhata Medal, Rajiv Gandhi Gold Medal, Indus Foundation Award for Research Excellence etc.
- The university has hired internationally recognized faculty from some of the finest institutions in India and in the world such as MIT, Harvard, Cambridge, Oxford, University of Pennsylvania, University of California (Berkeley), IISc, IITs and IIMs etc.

Evaluation Process and Reforms

- The university follows instructor driven, continuous assessment scheme
- Students are shown the end-term answer sheets on 'viewing-day' before submission of the grades
- Examination process makes substantial use of technology and grade submission and result declaration are fully online
- Results have been declared within 15 days from the last day of the examinations

Student Performance and Learning Outcomes

- Program outcomes, Program specific outcomes and course outcomes are stated and displayed on website and communicated to teachers and students
- Attainment of POs, and COs are measured through indirect and direct measures such as surveys, graduation rates, number of students progressing to advanced degrees, job placements, student performance in competitive examinations etc.
- Graduation and placement rates are more than 90%

Research, Innovations and Extension

SNU is a research focused and innovation driven University. It has created interdisciplinary research centers such as *Center for Public Affairs and Critical Theory*, the *Big Data Analytics Center*, the *Center of Informatics* and the *Institute for Innovations & Inventions with Mathematics and Information Technology*.

Key parameters highlighting the institutional focus on research and innovation:

- % of Full Time Faculty with PhD or Post-Doctoral experience: 85%
- Total no. of research papers published by SNU faculty members >5000

- The publications include high impact, prestigious journals such as Nature and Nature Communications, Accounts of Chemical Research, Physical Review Letters etc.
- Research output with SNU affiliation ~ 900 (Scopus)
- Amount invested in creation of conducive research infrastructure: Approx. Rs. 30 Crores (Excluding land and building cost)
- No. of Full Time PhD students enrolled: About 200
- Stipend paid to SNU PhD students by the Shiv Nadar Foundation is highest in India
- More than 400 students have participated in Opportunities for Undergraduate Research (OUR) program and many of them have resulted into research papers by UG students
- Extramural research funding: About Rs. 30 Crores
- Externally sponsored projects: About 70 at present
- All the departments at School of Natural Sciences have DST FIST grant
- SNU is registered with Department of Scientific and Industrial Research (DSIR)— An acknowledgement of the fact that the university is a research institution
- SNU was the first among the first list of institutions that were awarded Atal Incubation Center grant by Niti Aayog

Awards and Recognitions for research and innovation

- The university has recently been recommended for "Institution of Eminence" status by MHRD appointed committee
- The university received a great report from the UGC Expert Committee Probably the best in India
- NIRF Rankings 2018 the university is the youngest to feature in the top 50 (Overall) amongst all the Indian universities
- The University of the Year Award 2016 (Less than 10 years of existence) by FICCI
- Avant-Garde Institute of India Award by CII
- The university has academic partnerships with top universities such as University of California Berkeley, and University of Michigan
- Atal Incubation Center grant from Niti Aayog

Infrastructure and Learning Resources

A meticulous planning has been done in designing the university campus and the infrastructure plan has been benchmarked with globally acclaimed campuses in view of the university's research focused, and fully residential nature. The total planned built up area of the university at its equilibrium state is going to be about 6.25 million sq.ft.

Physical Facilities

- Built up area of 2.0 million sq. ft., with another 1.0 million sq.ft. under advanced stage of construction.
- Each classroom is fully equipped with projection system and Wi-Fi facility
- A world-class sports infrastructure with 120000 sq. ft. of **indoor sports complex**, including facilities like student activity center, basketball, badminton, and squash courts, athletic track, rock climbing walls, yoga room, table tennis and a huge gymnasium and 65000 sq.ft. of outdoor sports facilities having tennis, volleyball, and basketball courts and cricket, and football fields.

Library as a learning resource

- The Central Library has reference, circulation, audio-visual, periodical, book-bank, digital library, and reprographic sections
- The library has 11435 e-journals, 20 online-databases and 169 institutional repositories
- Rare books collection
- All e-resources can be accessed through LAN on the campus and through VPN remotely. OPAC/Web
 OPAC is the main tool to provide access to the library collection.
- Library is automated using Koha open source library management system.
- Besides, the university library has membership of various consortia such as E-Shodhsindhu, Shodhganga, INFLIBNET, DELNET, etc.

IT Infrastructure

SNU has created teaching, learning and community spaces round the campus which leverages technology significantly. Some key features are:

- High Performance Computing (HPC) cluster with 30 TeraFlops of Theoretical Peak Performance from a total of 62 Compute Nodes
- Learning Management System "Blackboard"
- ERP for student life cycle management covering processes like Admissions, Student Records, Grades, Student Financials, Academic Advisement, Campus Community, Payment Gateway etc.
- Intranet based video platform for e-learning which contains videos consisting of web courses and video lectures from NPTEL
- G-suite for Education cloud based solution for messaging and collaboration
- Urkund, e-mail based, fully-automated system for plagiarism check

Student Support and Progression

The university follows a merit-based/need-blind admission system. All admitted students are supported by the Shiv Nadar Foundation by scholarships. The Foundation has given total scholarships to the tune of Rs. 120 crores in last 5 years. The university also offers financial support, one of the highest in India, to attract best Ph.D. students.

The Career Development Center (CDC) at the university supports students in shaping and their careers. Intensive Student Development Program focusses on training students on key skills through career counseling, boot camps and talks. The industry connect program builds a network of partnering organizations focusing on industry leadership talks, mentorship programs, internships and eventually placements. CDC also provides guidance for competitive examinations such as GRE, GMAT, GATE, Civil Services, etc.

Few salient features

- 100% students get benefitted by the programs and services offered by CDC
- The average placement rate for those eligible and opting for placements is more than 95%.
- SNU graduates have secured admissions to top universities across the world such as Cambridge,

Cornell, Columbia, NUS, University of Chicago, Duke, McGill, etc. and the university has received a great feedback from employers and institutions alike

- University has an active international office that looks after internationalization comprehensively
- SNU currently has about 15 partnerships with few of the leading universities across the world such as University of California Berkeley, University of Michigan, University of Queensland, University of Warwick, University of Bologna, Heidelberg etc. that involves student and faculty mobility and academic and research collaborations
- SNU is probably the only private university that conducts student council elections based on the recommendations of Lyngdoh Committee
- Though the university is only 7 years old, many alumni chapters across the world have been formed and alumni community engages actively with their alma mater
- On Campus Jobs help students inculcate professional ethics, leadership and service attributes. Students have been employed in laboratory and library management, project monitoring, conducting and analyzing various feedbacks, managing help desks, aiding departments in enabling functions of the University like Admissions, Career Development Centre, Deans' Office, Hostels, Sports and allied activities etc. under this initiative in past.

Governance, Leadership and Management

The university is governed by the provisions of Shiv Nadar University Act, Statutes, and Ordinances and follows a participative system of governance to achieve the goals and objectives stated in the vision and mission of the University. Faculty members and students are consulted and are involved in the decision-making process as members of various committees. The Court is the apex body, and the Executive Council, the Academic Council, the Finance Committee, The Asset Management Committee, The Planning Board, The Nomination Committee, The Board of Faculty, The Admission Committees including Under Graduate and Post Graduate/PhD Admission Committee, The Examination Committee, Disciplinary Committee, and Proctoral Board are key governing bodies.

There are two primary operational features of governance as needed in a global institution: First, there is an autonomy for continuous, internal professional assessment/review and accountability. Second, an essential inbuilt flexibility in all sections of the system exists, for implementing changes as and when required, to stay relevant in this fast-changing world.

Recently, Shiv Nadar University applied for "Institution of Eminence" status to the UGC and MHRD and has been recommended for the same by the Empowered Expert Committee. As part of the application, the university revisited the perspective plan and created a reinvigorated plan keeping in view the global ranking methodologies and requirements with an aim to feature in top 500 universities in next 10 years and among top 100 subsequently.

The university conducts internal audits periodically and the annual external audits is conducted by one of the big-four accounting firms. Shiv Nadar Foundation publishes its audited financial records in public domain.

The university has an active Internal Quality Assurance Cell (IQAC) that undertakes periodic Academic Administrative Audit and suggests areas of improvement. The university is participating in NIRF ranking since last two years and has secured 96 and 72 overall ranks respectively. It was ranked 48th in the university category in NIRF 2018.

Institutional Values and Best Practices

Shiv Nadar University, in its short history, has created an institutional culture that is based on the following values:

- 1. Freedom of inquiry, and creation of an intellectual environment conducive to free, open and respectful exchange of ideas
- 2. Academic excellence and integrity
- 3. Engaged teaching and learning based on dialogue, student involvement and experiential learning
- 4. Research, scholarship and creative activity as fundamental sources of new knowledge, contributions to the betterment of society and expressions of the human spirit
- 5. Recognition and respect for the diversity of people and ideas, a spirit of inclusiveness, a global perspective, and a sense of community for campus life
- 6. Cultivation of character and the modeling of honesty, integrity, compassion, fairness, respect and ethical behavior, both in the classroom and beyond
- 7. A commitment to social justice and public service as the foundation of individual, educational, social, economic and political development
- 8. Environmental consciousness, sustainability and prudent management of natural resources
- 9. Responsible stewardship and thoughtful reflection, collaboration, planning and evaluation as essential for meeting the changing needs of those we serve

The university follows many best practices but Opportunities of Undergraduate Research (OUR) program and the flexible, multidisciplinary undergraduate curriculum consisting of common core curriculum and a system of university wide electives are the heart of its undergraduate academic experience. The university also lays special Emphasis on Creation of a Research Ecosystem and integrating Research at both Undergraduate, and Graduate Levels of Studies.

Some other noteworthy best practices:

- Integration of Research Experiential and Applied Learning (REAL); Global and International Studies (GIS); and Values, Ethics, Leadership and Service (VELS) components into the curriculum.
- Creation of interdisciplinary research centers
- Faculty recruitment process to attract best talent from all over the world
- International collaborations with leading research universities
- Merit based transparent admission process. Every admitted student is supported by Shiv Nadar Foundation through scholarships
- Learning and Academic Support Center based on peer learning
- Examination System and Instructor Driven Continuous Assessment Approach
- A comprehensive Career Development Support
- Student Mentoring and Advising System
- University Counseling Services
- On Campus Jobs
- Special Emphasis on Entrepreneurship through Atal Incubation Center

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the University	ity
Name	SHIV NADAR UNIVERSITY
Address	NH-91, TEHSIL-DADRI, GAUTAM BUDDHA NAGAR, UTTAR PRADESH
City	DADRI GAUTAM BUDDHA NAGAR
State	Uttar pradesh
Pin	201314
Website	www.snu.edu.in

Contacts for	Communication						
Designation	Name	Telephone with STD Code	Mobile	Fax	Email		
Vice Chancellor	RUPAMANJ ARI GHOSH	0120-3819100	9871998747	0120-300158 0	registrar@snu.edu.i		
Professor	G. NAVEEN BABU	0120-3819142	7358020202	_	naveen.babu@snu. edu.in		

Nature of University	
Nature of University	State Private University

Type of University	
Type of University	Unitary

Establishment Details	
Establishment Date of the University	06-04-2011
Status Prior to Establishment,If applicable	

Page 11/124 23-10-2020 04:32:43

Recognition Details		
Date of Recognition as a University by UGC or Ar	ny Other National Ag	gency:
Under Section	Date	View Document
2f of UGC	12-08-2011	View Document
12B of UGC		

University with Potential for Excellence	
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No

Location,	Location, Area and Activity of Campus						
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	Program mes Offered	Date of Establishment	Date of Recognition by UGC/MHRD
Main campus	NH-91, TEHSIL- DADRI, GAUTA M BUD DHA NAGA R, UTTAR PRADE SH	Rural	286	150650.5	UG, PG, Ph.D. and PG DIploma		

2.2 ACADEMIC INFORMATION

Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	0
Affiliated Colleges	0
Colleges Under 2(f)	0
Colleges Under 2(f) and 12B	0
NAAC Accredited Colleges	0
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	0
Colleges with Postgraduate Departments	0
Colleges with Research Departments	0
University Recognized Research Institutes/Centers	0

Is the University Offering any Programmes Recognised by any Statutory	: No
Regulatory Authority (SRA)	

Details Of Teaching & Non-Teaching Staff Of University

				Te	aching	Faculty	7					
	Prof	Professor Associate Professor Assistant Professor										
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned				32				30				105
Recruited	28	3	0	31	19	11	0	30	72	33	0	105
Yet to Recruit				1				0				0
On Contract	7	0	0	7	0	1	0	1	1	3	0	4

Non-Teaching Staff						
	Male	Female	Others	Total		
Sanctioned				195		
Recruited	107	68	0	175		
Yet to Recruit				20		
On Contract	14	6	0	20		

Technical Staff								
	Male	Female	Others	Total				
Sanctioned				41				
Recruited	38	3	0	41				
Yet to Recruit				0				
On Contract	0	0	0	0				

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualificatio n	Professor		Assoc	sociate Professor Assistant Profe		ant Profes	sor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	1	0	0	0	0	0	1
Ph.D.	25	3	0	16	9	0	69	30	0	152
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	3	0	0	2	2	0	3	3	0	13

Temporary Teachers										
Highest Qualificatio n	Professor		Associate Professor		Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

	Part Time Teachers									
Highest Qualificatio n	Professor		Associate Professor		Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	0	0	1	0	0	0	1	0	4
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	1	0	0	0	0	0	1	1	0	3

Distinguished Academicians Appointed As

	Male	Female	Others	Total
Emeritus Professor	0	0	0	0
Adjunct Professor	1	0	0	1
Visiting Professor	4	0	0	4

Chairs Instituted by the University

Sl.No	Name of the Department	Name of the Chair	Name of the Sponsor Organisation/Agency
1	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE

Provide the Following Details of Students Enrolled in the University During the Current Academic Year

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
PG Diploma	Male	0	1	0	0	1
recognised by statutory	Female	0	0	0	0	0
authority including university	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	23	90	0	0	113
	Female	22	51	0	0	73
	Others	0	0	0	0	0
UG	Male	274	988	2	3	1267
	Female	160	397	2	1	560
	Others	0	0	0	0	0
PG	Male	17	76	0	0	93
	Female	17	69	0	0	86
	Others	0	0	0	0	0
Certificate / Awareness	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Does the University offer any Integrated Programmes?	Yes
Total Number of Integrated Programme	1

Integrated Programme	From the State where university is located	From other States of India	NRI students	Foreign Students	Total
Male	1	0	0	0	1
Female	0	0	0	0	0
Others	0	0	0	0	0

Details of UGC Human Resource Development Centre, If applicable

Year of Establishment	01-01-1969
Number of UGC Orientation Programmes	0
Number of UGC Refresher Course	0
Number of University's own Programmes	0
Total Number of Programmes Conducted (last five years)	0

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Art And Performing Arts	<u>View Document</u>
Center For Public Affairs And Critical Theory	<u>View Document</u>
Chemical Engineering	<u>View Document</u>
Chemistry	View Document
Civil Engineering	View Document
Communication	View Document
Computer Science And Engineering	View Document
Economics	View Document
Electrical Engineering	<u>View Document</u>
English	<u>View Document</u>
History	View Document
Life Sciences	View Document
Mathematics	View Document
Mechanical Engineering	View Document
Physics	View Document
School Of Management And Entrepreneurship	View Document
Sociology	View Document

Page 17/124

3. Extended Profile

3.1 Program

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
37	33	36	34	25

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

Number of departments offering academic programes

Response: 17

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2176	2163	2142	1583	980

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

Number of outgoing / final year students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
538	414	284	295	1

File Description		Docun	nent	
Institutional Data in Prescribed For	mat	View 1	<u>Document</u>	

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2158	2087	1782	1526	966

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of revaluation applications year-wise during the last 5 years

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	1	1	1

3.3 Teachers

Number of courses in all programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
680	627	629	491	332

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of full time teachers year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
166	169	166	150	144

File Description		Docun	nent	
Institutional Data in	Prescribed Format	<u>View</u>]	<u>Document</u>	

Number of sanctioned posts year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
167	170	167	150	144

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

Page 19/124 23-10-2020 04:32:58

3.4 Institution

Number of eligible applications received for admissions to all the programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
7452	5394	3617	2666	1771

File Description	Document	·
Institutional Data in Prescribed Format	<u>View Document</u>	

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	1	1	1

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

Total number of classrooms and seminar halls

Response: 74

Total number of computers in the campus for academic purpose

Response: 3100

Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
22186	31658	23733	23725	14850

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed /adopted have relevance to the local/ national / regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the University

Response:

Framework: The University's vision is to contribute "to the betterment of the world; Pledging to serve the higher education needs of the State... and the global community," and the mission is to evolve "research and teaching programs that tackle the most pressing problems of the State... and the global community." The curricula developed by the University **fully align** with the stated vision and mission.

Contextual Curricula: The architecture of the University's curricula consists of a common core of undergraduate courses, and a flexibility to allow students to choose multiple electives for enhanced breadth of learning and engagement, together with acquiring depth in a Major subject. The Core Common Curriculum (CCC) courses provide the students a broad-based understanding of the world, its physical, biological and social systems, the development of human civilization and culture, and the historical development and modern formation of global society with a special emphasis on India.

Experiential Learning: Embedded through work and service opportunities including research projects; design projects; practicums; cooperative education; service learning program; internships; cultural immersion programs.

CBCS: The in-built flexibility of the undergraduate curriculum has scope for every student to progress through the program at his/her own pace. The flexibility in the structure allowing students to transcend disciplinary barriers is a paramount example of **Choice Based Credit System** (CBCS) of the UGC.

Global: Cross-learning and global exposure in a multi-cultural environment is enabled by **partnering with the finest institutions around the world** for specific Schools/disciplines, through study abroad, internships, research, and service opportunities.

Future Ready: As 'employability wrapper', the University offers Specializations in tune with the needs of industries or frontier research. With the job market changing very fast in today's world, the key skill we impart to our students is that of **critical thinking** and **creative problem-solving**. The University emphasizes on **exploration-driven 'learning by doing'**, and on fostering students' ability to integrate critical thinking, interpretive and problem-solving skills, scientific exploration and normative principles into their world-view. The content of the curricula and the mode of delivery prepare the students to face practical problems and challenges in a complex, changing, and unpredictable world.

Multidisciplinary & Interdisciplinary: An **interdisciplinary** approach is often required to address the pressing problems faced by the State, the country and the world. The unique curriculum developed for the post-graduate program on "**Water Science & Policy**" is an example of the University's multidisciplinary and interdisciplinary **advantage** and its ability to create '*Societal Impact through Science-Driven Policy*"

Page 21/124 23-10-2020 04:33:00

Making'.

Processes: Each program at the University is designed through an extensive consultation mechanism with internal and external academic experts and leading researchers from India and abroad, industry leaders, policy makers, and is reviewed regularly through a robust feedback mechanism from different stakeholders. The degree requirements are listed in the Undergraduate Handbook and specific program outcomes are clearly stated in the program prospectus that are published on the University website. Each course has its learning outcomes, syllabi, reading lists, assessment schemes, prerequisites etc. published on the institutional ERP.

File Description	Document
Link for Additional Information	View Document

1.1.2 Percentage of programs where syllabus revision was carried out during the last five years

Response: 100

1.1.2.1 How many programs were revised out of total number of programs offered during the last five years

Response: 47

1.1.2.2 Number of all programs offered by the institution during the last five years

Response: 47

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years	View Document

1.1.3 Average percentage of courses having focus on Employability/ Entrepreneurship/ Skill development during the last five years

Response: 100

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
680	627	629	491	332

File Description	Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 37.55

1.2.1.1 How many new courses are introduced within the last five years

Response: 1036

1.2.1.2 Number of courses offered by the institution across all programs during the last five years

Response: 2759

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.

Response: 37

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability,

Page 23/124 23-10-2020 04:33:04

Human Values and Professional Ethics into the Curriculum

Response:

The University believes in imparting holistic education among its students and clearly lays down the objectives of the education it seeks to inculcate in its prospectus that says

"Students shall be trained to be good citizens of India and the world and have a firm grounding in issues related gender, environment and sustainability and to values, ethics, leadership and service."

To achieve these objectives, the university has undertaken the following initiatives at both undergraduate, and graduate teaching and at research level:

- Every undergraduate student at the university is required to take at least 18 credits in Values, Ethics, Leadership and Service (VELS) courses that imparts a life-long commitment to leadership grounded in values, ethics and service to society, to fulfil their degree requirements.
- Every undergraduate student at SNU must take a core group of common subjects designated as **Core Common Curriculum** (or CCC) courses. Some examples of courses offered on gender, environment and human values and ethics under CCC courses are:
- 1. Gender Violence and Social Marketing for Social Change: This course takes a critical look at gender violence, and explore ways of addressing it through student-designed interventions.
- 2. Secular Ethics for Millenials: The Why and What of Universal Values
- 3. The Mahabharata Ethical issues
- 4. Environmental Design and Ethics
- 5. Swacch Bharat Internships
- 6. Nature, Environmentalism, and Ecospirituality
- 7. Is being practical the only value we are left with?
- The University has also established a research center Center for Environmental Sciences & Engineering (CESE) that has undertaken projects meant to study, document, and preserve the local environment and natural heritage in partnership with the campus and neighboring community. Recently, it has published a first of its kind of a comprehensive report that enlists the natural flora found in and around the university. Similar work is underway to document the local fauna. Apart from its contributions to research in these topics, the Center provides advanced training to students in Environmental Science, Natural Resource Management, Socio-economics, Public Policy and Engineering from the environment perspective for sustainable development. Among the educational activities of the Center is a compulsory four credit course on Environmental Science offered to all undergraduate students of the university that includes a mandatory, comprehensive field study visit to various wildlife/bird sanctuaries.
- Another interesting example where the university has taken a lead on national level is by launching a multi-disciplinary, modular, master's program MSc in Water Science and Policy offered by the Centre for Public Affairs and Critical Theory. The main aim of this program is to create a critical mass of water professionals with a historically and socially contextualized, multi-disciplinary perspective and understanding of water. These water professionals would guide development of sustainable and just 21st century policies, programs and solutions to the growing water crisis. The faculty members of the program are drawn from the social sciences, natural sciences and engineering. The program has been widely appreciated with the Niti Aayog writing to

all the State Governments urging them to send their officials attend the program.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	View Document

1.3.2 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 1000

1.3.2.1 Number of value-added courses are added within the last five years

Response: 1000

File Description	Document
List of value added courses	<u>View Document</u>

1.3.3 Average percentage of students enrolled in the courses under 1.3.2 above

Response: 100

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2176	2163	2142	1583	980

1.3.4 Percentage of students undertaking field projects / internships

Response: 83.96

1.3.4.1 Number of students undertaking field projects or internships

Response: 1827

File Description	Document
List of programs and number of students undertaking field projects / internships	View Document

1.4 Feedback System

- 1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents for design and review of syllabus Semester wise /year-wise
- A. Any 4 of above
- B. Any 3 of above
- C. Any 2 of above
- D. Any 1 of above

Response: A. Any 4 of above

File Description	Document
URL for stakeholder feedback report	View Document

- 1.4.2 Feedback processes of the institution may be classified as follows:
- A. Feedback collected, analysed and action taken and feedback available on website
- B. Feedback collected, analysed and action has been taken
- C. Feedback collected and analysed
- D. Feedback collected

Response: B. Feedback collected, analysed and action has been taken

File Description	Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 78.34

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1673	1678	1693	1254	774

File Description	Document
List of students (other states and countries)	<u>View Document</u>

2.1.2 Demand Ratio(Average of last five years)

Response: 6.3

2.1.2.1 Number of seats available year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
640	745	640	774	500

File Description	Document
Demand Ratio (Average of Last five years)	View Document

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 0

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
Average percentage of seats filled against seats reserved	View Document

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The University has a specially designed **Orientation Program** for incoming undergraduate students **before** the formal start of their first semester, which includes *diagnostic tests* in basic skills in Mathematics, English, and Computer Programming. Based on their performance in these diagnostic tests, students are directed to appropriate foundation (remedial) courses by the Adviser.

The undergraduate **advising** system in each Department allows the learners – slow or fast – to choose appropriate **credit load** in a semester and hence decide on the **learning pace**, as permitted in the University regulations.

In almost all courses, lecture classes are supplemented by **weekly tutorial** classes in groups with small numbers. The tutorials are meant for clearing **individual** difficulties/doubts in the current lecture topic, guiding technical problem solving, enabling assessment of the learning level of each student, and providing appropriate support.

The **sessional evaluation** in every course is a **continuous** process, and provides feedback to each faculty instructor about the learning level of **each** student, and take corrective measures as the course progresses.

Very importantly, a **Learning and Academic Support Centre** (LASC) at the University provides students a learning environment and experience that differ from the classroom. LASC focuses on high-quality, individual and small-group student-centered and student-led learning based on the idea that all students can benefit from targeted review and additional academic support that seeks to combine an understanding of individual learning styles with peer-to-peer mentoring and teaching. The carefully chosen tutoring staff at the LASC provides instructional approaches that are tailored to the skill levels and learning styles of the students who enroll, and encourages them to become 'active' learners, taking the responsibility of learning and academic success. The vision is that symbiotic learning empowers students to teach and learn simultaneously while taking ownership and responsibility of helping their peers in expanding their horizon of knowledge. SNU has a distinct approach to the undergraduate curriculum that emphasizes on classroombased pedagogy and assessment; on independent exploration and project-based assignments. Thus, as the primary academic support service for students at SNU, the LASC assists students in transitioning to the "SNU way"; navigating its academic terrain; creating networks of resources; and achieving academic, personal and professional goals. The program to date has witnessed enthusiastic response every semester and showcases key ingredients such as positive inter-dependence, face-to-face interaction, group processing along with individual and group accountability.

For advanced learners, the University offers a special program, called **Opportunities for Undergraduate**

Research (OUR). This provides opportunities for undergraduate students to work on research projects of their interest irrespective of their current program of study. Approximately 60 projects are selected every year for support by the University. A jury consisting of senior faculty members assesses the projects and final oral presentations made by the students. Top three project students and all 'excellent'-graded project students receive special awards. Several OUR projects have led to conference presentations and peer-reviewed journal publications with undergraduate students as lead authors. The program is highly engaging, and the skills developed become useful for all future careers.

File Description	Document
link for additional information	<u>View Document</u>

2.2.2 Student - Full time teacher ratio				
Response: 13.11				
2.2.3 Percentage of differently abled students (Divyangjan) on rolls				
Response: 0				
2.2.3.1 Number of differently abled students on rolls				
2.2.3.1 Number of differently abled students on r	colls			
2.2.3.1 Number of differently abled students on r File Description	Document Document			

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The University incorporates **experiential learning** in the curriculum by giving credit for activities such as research projects; design projects; practicums; cooperative education; service learning programs; internships; cultural immersion programs, volunteering service, within and outside of the University setting. At least 20% of the courses have to explicitly cover the category of **Research Experiential and Applied Learning (REAL)** for any undergraduate degree program at the University.

There are prescribed **laboratory components** in a large number of courses in Science and Engineering for hands-on training of the students in state-of-the-art laboratories.

Every undergraduate program has a **final-year** research **project** of at least 12 credits. These projects require hands-on work by the students, through specific university research and/or industry internships, field visits and field work.

Participative learning is promoted as a general teaching practice across all courses of the University. Certain courses which are taken by large numbers of our students especially highlight this practice. In the CCC course titled Literature, Identity and Theatre, theatre and group activities are used to develop Communication and Interpersonal Skills, Decision Making and Critical Thinking Skills, Coping and Self-Management Skills. This course is taught to most undergraduate students during their first year. The course Academic Writing is a compulsory course for all undergraduate students of the School of Humanities and Social Sciences and uses multiple writing assignments to illuminate the difference between summary and analysis. Creativity and Concept in Design is a compulsory course for Engineering majors which aims at helping students to understand and appreciate design process and design thinking. This course is a first step towards project-based learning and its emphasis is on 'learning by doing'.

Problem-solving methodologies are widely used in the courses offered by the School of Natural Sciences and the School of Engineering. All Engineering students take a course on **Problem Solving through Programming**, in which C/C++ programming is motivated by a host of problems from algorithms, mathematics, and other applications.

The courses offered by the School of Management and Entrepreneurship also imaginatively blend these various approaches. The School uses practices such as group work, case studies, stock market simulations and social media campaigns to provide an immersive learning experience.

All across the University, the mode of delivery of the curriculum is **active or participatory** – it promotes **critical thinking** and imparts **creative problem-solving skills**. The emphasis is not on 'what to think' but 'how to think'.

Very importantly, the University promotes these **enhanced learning experiences** for its students, and **enables and supports its faculty in this endeavor** through regular workshops (organized by the Faculty Development Center), mentoring of new faculty members, collecting mid-semester (in addition to end-semester) feedback from students to identify and resolve issues in ongoing courses, and promoting through awards for exceptional teachers. The Learning Management System, *Blackboard* is also used to facilitate learning, and increase communication between the faculty instructors and the students.

File Description	Document
Link for Additional Information	View Document

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 99.4

2.3.2.1 Number of teachers using ICT

File Description	Document
List of teachers (using ICT for teaching)	<u>View Document</u>
Provide link for webpage describing the "LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 19.43

2.3.3.1 Number of mentors

Response: 112

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 99.64

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 86.89

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
146	148	143	130	124

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 8.38

2.4.3.1 Total experience of full-time teachers

Response: 1391.9

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 8.18

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	4	3	4	1

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e-copies of award letters (scanned or soft copy)	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 89.73

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
148	153	150	137	128

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results during the last five years

Response: 14.6

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
20	16	19	12	6

File Description	Document
List of programs and date of last semester and date of declaration of result	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 0

2.5.2.1 Number of complaints/grievances about evaluation year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

2.5.3 Average percentage of applications for revaluation leading to change in marks during the last five years

Response: 0

2.5.3.1 Number of applications for revaluation leading to change in marks year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

2.5.4 Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system

Response:

Examination Procedures

• A Controller of Examinations (CoE) has been duly appointed by the Vice-Chancellor to perform duties pertaining to all examinations of the university.

- An examination committee, consisting of the CoE and other senior faculty members, oversees the examination related activities in the university.
- The end semester examination dates are published in the Academic Calendar and the detailed examination schedule published by the CoE.
- The CoE office sends necessary instructions to students for their appropriate conduct during the examinations and to faculty for conducting examinations with all fairness, well in advance.
- Use of any unfair means is prohibited and the reported cases are dealt with through the University's policy on academic malpractices that is available on the University's website.
- During the mid-semester and end semester examinations, the Examination Committee conducts regular visits to each examination hall and ensures the maintenance of sanctity of the examination being conducted in the university.
- Rules governing the university examinations and grade submission, approved by its Academic Council, have been published.
- The faculty evaluates the answer sheets and submits the grades to the office of CoE along with the marks records of continuous assessment, mid semester exams and end semester exams. They also submit the grading scheme used and the moderation report (in case of multiple sections of a course).

Processes Integrating IT

- The university uses a Learning Management System 'Blackboard' that helps faculty members conduct online quizzes and tests. It also has an assignment submission system with inbuilt plagiarism checker to help faculty evaluate the assignments. The faculty also shares continuous evaluation results and marks with the students through the LMS.
- The University uses a software to prepare examination timetable of nearly 150 undergraduate courses each semester, which is further modified using IT tools to be conducted within the specified window of 9 to 10 days.
- The faculty submits the grades along with the marks records of continuous assessment, mid semester exams and end semester exams through an online portal, which also has a facility to submit the grading scheme used and the moderation report (if applicable).
- The university uses Enterprise Resource Planning (ERP) education solution software developed by Peoplesoft Oracle. It is used to store grades, GPAs and other records of students. The grades obtained by students are published through this platform. The grade sheets of the students are also printed through this software.
- Any request for re-evaluation and subsequent modification in declared grades is processed through this application within a prescribed timeline.

Continuous Internal Assessment System

The continuous Internal Assessment system is in effect since 2011. Other than the end semester examinations each course comprises multiple evaluation tools such as quizzes, tests, assignments, presentations, mid semester exam, etc. The Learning Management System Blackboard, used by the university, plays an important role in implementing the continuous assessment, the faculty conduct tests through the platform, gives assignments and evaluates with the help of in-built plagiarism checker. The continuous evaluation marks are also declared to the students through the Blackboard.

- 2.5.5 Status of automation of Examination division along with approved Examination Manual A. 100% automation of entire division & implementation of Examination Management System (EMS)
- B. Only student registration, Hall ticket issue & Result Processing
- C. Only student registration and result processing
- D. Only result processing

Response: A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	<u>View Document</u>
Current Manual of examination automation system	View Document
Annual reports of examination including the present status of automation	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

Program learning outcomes for every program are developed at the department level with an active participation from the faculty members from the concerned school, the relevant Dean's office, and the board of studies. While designing the outcomes, few of the resources commonly used across the university are Creating Learning Outcomes by Stanford University, Bloom's Taxonomy of Educational Objectives, Anderson-Krathwohl Revision to Bloom's Taxonomy of Educational Objectives, and Developing Learning Outcomes by Gillian Pierce, Director of Learning Assessment Office of the Provost, Boston University and some of the basic questions kept in view include, the expected career options after completing the program, possible ways by which students could demonstrate their knowledge, breaking down the program objectives to course outcomes, embedding experiential, applied, and service learning to meet these expectations, and how to communicate them to students and faculty etc. Additionally, each program outcome document also takes helps of curriculum mapping to create a matrix between program goals and course outcomes.

With the help of the process described above, all degree programs offered by the university have clearly defined learning outcomes for the program that enlist the expected competencies among students upon the program completion. These are further broken down at the course level and a comprehensive course description template that includes details of the expected course outcomes, assessment methods, suggested

readings, and competencies expected from students at the course completion. Learning outcomes for all programs are published at the university/departmental website pages and in the program prospectus, available with faculty members, students, and accessible to parents too. These documents are also available on the various IT platforms of the university such as LMS Blackboard, the institutional ERP by PeopleSoft Oracle, Parent Portal etc.

Few sample program outcome links are given in the additional information field below.

Each program prospectus also identifies and clearly enlists measures to assess each of the learning outcomes that include a combination of direct measures, such as review of student major projects with a pre-published grading rubric, and indirect measures, such as student surveys.

File Description	Document
Link for Additional Information	<u>View Document</u>

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

The university has adopted a modified and contextualized matrix based on MIT's "Methods of Measuring Learning Outcomes and Value Added" that involved various direct, and indirect measures to evaluate learning outcomes at course, and program level.

Few of the indirect measures include freshman and exit surveys, graduation rates, number of students progressing to advanced degrees, job placements, and indicators used by faculty members including grades, course evaluations surveys (during the semester and end-of-semester), quizzes, and other in-class techniques etc. whereas the direct measures undertaken at faculty level include pre/post tests, analysis of assignments designed to test conceptual understanding, observations of students performing a task, analysis of student work products (e.g., exams, essays, oral presentations), thesis and/or project work, student portfolios compiled over the course of study, student performance in competitive examinations such as GATE, CAT, GRE, GMAT etc.

A macroscopic, university level evaluation and analysis is undertaken every year with the help of following quantitative and qualitative measures

- 1. **Student feedback system** conducted at the end of every semester. There are specific questions in the survey that asks students about their learning experience and attainments as outlined in the course outcome documents.
- 2. **Industry placements and feedback** the data is collected, continuously monitored and reports presented to the academic, and executive council of the university on a regular basis.
- 3. **Students opting for higher Studies** one of the key indicators of the attainments of the program outcomes if the students are able to qualify the rigorous competition to get admitted for higher studies in top ranked universities.
- 4. Entrepreneurial ventures another indicator of the program outcomes that indicates if students

could apply what they learnt in the program and start an entrepreneurial venture.

Besides, the CoE presents a detailed analysis report on the examination results to the Academic Council which takes note of the same and suggests the relevant school/department about the course corrections, if any.

Lastly, the university is also measuring the graduation outcomes from the NIRF rankings since last 3 years. The university is among the top 100 institutions in India, including IITs, IIMs, and IISc on the Graduation Outcomes parameter which measures indicators such as placements, higher Studies, and entrepreneurship; median salary; graduating Students Admitted Into Top Universities; and the number of Ph.D. students graduated.

File Description	Document
Link for Additional Information	<u>View Document</u>

2.6.3 Average pass percentage of Students

Response: 92.12

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 538

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 584

File Description	Document
List of programs and number of students passed and appeared in the final year examination	View Document
Link for annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.09

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution has a well defined policy for promotion of research and the same is uploaded on the institutional website

Response: Yes

File Description	Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year)

Response: 941.31

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14

File Description	Document
List of teachers receiving grant and details of grant received	View Document

3.1.3 Number of teachers awarded international fellowship for advanced studies/ research during the last five years

Response: 17

3.1.3.1 The number of teachers awarded international fellowship for advanced studies / research year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
6	7	1	2	1

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers.	View Document

3.1.4 Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates, other research fellows in the university enrolled during the last five years

Response: 263

3.1.4.1 The Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows in the university enrolled year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
91	65	56	43	8

File Description	Document
List of research fellows and their fellowship details	<u>View Document</u>

3.1.5 University has the following facilities

- 1. Central Instrumentation Centre
- 2. Animal House/Green House / Museum
- 3. Central Fabrication facility
- 4. Media laboratory/Business Lab/Studios
- 5. Research/Statistical Databases

Any four facilities exist

Three of the facilities exist

Two of the facilities exist

One of the facilities exist

Response: Any four facilities exist

File Description	Document
List of facilities provided by the university and their year of establishment	View Document
Link to videos and photographs geotagged	View Document

3.1.6 Percentage of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other similar recognition by government agency

Response: 41.18

3.1.6.1 The Number of departments with UGC-SAP, CAS, DST-FIST, DBT,ICSSR and other similar recognition by government agency

File Description	Document
List of departments and award details	<u>View Document</u>
e-version of departmental recognition award letters	View Document

3.2 Resource Mobilization for Research

3.2.1 Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 25.1

3.2.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14	
0	9.5	0	15.6	0	

File Description	Document
List of project and grant details	<u>View Document</u>
e-copies of the grant award letters for research projects sponsored by non-government	View Document

3.2.2 Grants for research projects sponsored by the government sources during the last five years

Response: 2176.65

3.2.2.1 Total Grants for research projects sponsored by the government sources year-wise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
612.34	606.33	450	471.81	36.17

File Description	Document
e-copies of the grant award letters for research projects sponsored by government	<u>View Document</u>

3.2.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 2.23

3.2.3.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 71

3.2.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 159

File Description	Document	
Supporting document from Funding Agency	<u>View Document</u>	
Link for funding agency website	<u>View Document</u>	

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

Response:

The Government of India setup the Atal Innovation Mission (AIM) at NITI Aayog in 2016 with the overarching purpose of promoting a culture of innovation and entrepreneurship in the country. This was done to address the need to create high-class incubation facilities across various parts of India with suitable physical infrastructure in terms of capital equipment and operating facilities, coupled with the availability of sectoral experts for mentoring the start-ups. Niti Aayog received a total 1719 academic and 1939 non-academic applications for the grant. Ten institutions including Shiv Nadar University were selected from across the country after a four-stage evaluation process, in 2017.

Atal Innovation Mission, NITI Aayog, has provided a grant of Rs 8.8 crore to the Atal Incubation Centre at Shiv Nadar University, over a period of five years. First tranche of Rs 2.28 crore has been already been paid by Atal Innovation Mission in Nov 2017. Atal Incubation Center has been in operations since then.

Mission of the Atal Incubation Centre at Shiv Nadar University (SNU) is to develop a culture of entrepreneurship at SNU and in the region around SNU through innovation and execution, using cutting edge technology and business knowledge with a view of generating employment and positively impacting life of people.

Atal Incubation Centre is located within the campus in over 10,000 sq ft area. Facilities include co working spaces, conference room, wifi and other office support. Selected incubatees get advised by mentors on developing proof of concept, product market fit, developing business model, scaling up issues and for investor pitch.

Some of the Events are as under:

• The Game Changers (20 Aug 2017)

Pitch up competition for SNU students to showcase their business idea. A unique opportunity to view culturally sensitive startup community within the campus.

Moqsh 0.01 (19 Nov 2017)

MOQSH stands for marketing, operations, quiz, strategy and HR. Every year intellectuals from various business-schools all across the country become a part of MOQSH. The talented intellectuals participate in various simulation oriented and management-driven events to take home the coveted prizes. MOQSH is not just a platform that appreciates the creative instincts of the participants and unveiling their hidden aptitude. It is also a two-day long fest that's recreational and intuitive at the same time.

• AIC Information session (20 Jan 2018)

To elaborate on AIC's objective on creating & sustaining Entrepreneurship.

• SNU AIC Venture Challenge 1.0 (20 Jan 2018)

A Nationwide Business Plan based competition for evaluating entrepreneurial talent. This competition aims at identifying and selecting promising startups and ideas for induction into AIC.

• BIRAC Awareness Workshop (03 Aug 2018)

BIRAC is committed towards stimulating, fostering and nurturing the entrepreneurial flair in the Indian biotech ecosystem for which young researchers, students, academic faculties and budding entrepreneurs are the focal points.

• Think Tank (04 Sept 2018)

Think Tank is a motivational session, giving a lot of students, extrinsic motivators to shed their inhibitions and let their entrepreneurial spirit shine.

- SNU-AIC Business Conclave (27 Oct 2018)
- Moqsh 0.02 (24 Nov 2018)

File Description	Document	
Any additional information	<u>View Document</u>	
link for additional information	<u>View Document</u>	

3.3.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry

- Academia Innovative practices during the last five years

Response: 57

3.3.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
31	19	7	0	0

File Description	Document
List of workshops/seminars during the last 5 years	<u>View Document</u>

3.3.3 Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years

Response: 1

3.3.3.1 Total number of awards for innovation won by institution/teachers/research scholars/students yearwise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14

File Description	Document
List of innovation and award details	View Document
e- copies of award letters	View Document

3.3.4 Number of start-ups incubated on campus during the last five years

Response: 18

3.3.4.1 Total number of start-ups incubated on campus year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	4	8	6

File Description	Document
List of startups details like name of startup, nature, year of commencement etc	View Document

3.4 Research Publications and Awards

3.4.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

File Description	Document
Any additional information	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

3.4.3 Number of Patents published/awarded during the last five years

Response: 3

3.4.3.1 Total number of Patents published/awarded year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2	1	0	0	0

File Description	Document
List of patents and year it was awarded	View Document

3.4.4 Number of Ph.D.s awarded per teacher during the last five years

Response: 0

3.4.4.1 How many Ph.Ds are registered within last 5 years

Response: 18

3.4.4.2 Number of teachers recognized as guides during the last five years

Response: 00

File Description	Document
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

3.4.5 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 3.51

3.4.5.1 Number of research papers in the Journals notified on UGC website during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
153	132	104	104	65

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document

3.4.6 Number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings per teacher during the last five years

Response: 1.1

3.4.6.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
39	45	34	27	30

File Description	Document
List books and chapters in edited volumes / books published	View Document

3.4.7 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Response: 4.9

3.4.8 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - hindex of the Institution

Response: 24

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual

Response: Yes

File Description	Document
Soft copy of the Consultancy Policy	View Document
Minutes of the Governing Council/ Syndicate/Board of Management related to Consultancy policy	View Document
URL of the consultancy policy document	View Document

3.5.2 Revenue generated from consultancy during the last five years

Response: 54.3

3.5.2.1 Total amount generated from consultancy year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
32	4	3.20	15.1	0

File Description	Document
List of consultants and revenue generated by them	View Document

3.5.3 Revenue generated from corporate training by the institution during the last five years

Response: 117.08

3.5.3.1 Total amount generated from corporate training by the institution year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
105.93	5.60	5.55	0	0

File Description	Document
List of teacher consultants and revenue generated by them	<u>View Document</u>

3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

SNU's mission is that all the students should be trained to be good citizens of India and the world and have a firm grounding in issues related to values, ethics, leadership and service. Therefore, it has established a strong culture of service learning among its students through various curricular and extra-curricular initiatives.

Some key initiatives for extension activities undertaken by the university community, including faculty, staff and students are:

- 1. Skill training and development of local youth the university has trained and employed many local youths in the areas of security, house-keeping and maintenance, hospitality etc. As of date, the university and its vendors have 152 such employees on their rolls.
- 2. Biodiversity documentation and preservation The university is located close to a freshwater body that houses floral and faunal biodiversity. Rapid urbanization has strained these resources. The environmental sciences faculty members undertook an initiative involving students to document and preserve the local biodiversity. A floral biodiversity book has been published and faunal one is underway.
- 3. Volunteering for cleaning the lake on campus
- 4. Swachh Bharat volunteering recently the university students have won the best intern award under Swachh Bharat scheme
- 5. Volunteering for VidyaGyan Leadership Academy Established as a leadership academy for the economically underprivileged, meritorious students of rural India, VidyaGyan identifies potential leaders from across the UP State and exposes them to world-class education in a fully-residential campuses located at Bulandshehr and Sitapur. SNU students volunteer to interact with these children on issues ranging from Communication, Ethics/Leadership, Science/Critical Thinking, Career Counseling and Mentorship etc. About 70 students have volunteered for this initiative.

6.SNU students volunteer with **Shiksha** that is housed within the premises of the university and works to address the quality of K-12 education. Shiksha works to enhance the learning process through technology-enabled learning. It enhances the classroom environment and equips the teachers with an innovative high-engagement teaching mechanism to boost learning effectiveness and retention among children. Shiksha has also strategically extended into an adult literacy program, SHIKSHA+, that uses an ICT based methodology to instill the fundamentals of reading, writing and arithmetic skills to illiterate adults. SNU students intern with Shiksha on an ongoing basis. Snapshot summary of Shiksha outreach is:

Particulars	2015-16	2016-17	2017-2018	Since Inception	
No. of District	5	3	3	6	
No. of Block	5	3	6	9	
No. of Villages	232	163	184	549	
(in reachability)					
No. of Schools	340	195	137	637	
No. of Students rea	ched19000	5967	7939	32906	

Besides, students have an active volunteering society - AURA that works for an overall development of the village children in the areas close to the campus. The society started off by helping the children of the labourers working on site at the University and later this program was extended to the schools in nearby villages after getting permission from the school authority and with support of the University administration. Every year, the society enrol about 30 student volunteers.

File Description	Document
link for additional information	View Document

3.6.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 0

3.6.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5	<u>View Document</u>
years	

3.6.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 31

3.6.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2	11	6	5	7

File Description	Document
Number of extension and outreach programs conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.6.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 1.52

3.6.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. yearwise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
61	48	15	30	0

File Description	Document
Average percentage of students participating in extension activities with Govt. or NGO etc.	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year

Response: 3.6

3.7.1.1 Total number of Collaborative activities for research, faculty exchange, student exchange yearwise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
4	0	0	1	1

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document

3.7.2 Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years

Response: 105

3.7.2.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
31	16	12	46	0

File Description	Document
Details of linkages with institutions/industries for internship	View Document

3.7.3 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 67

3.7.3.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2017-18	2016-17	2015-16	2014-15	2013-14
19	17	11	11	9

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc

Response:

A meticulous planning has been done in designing the university campus and the infrastructure plan has been benchmarked with globally acclaimed campuses in view of the university's research focused, and fully residential nature. The total planned built up area of the university at its equilibrium state is going to be about 6.25 million sq.ft.

The university has one of the best-in-class infrastructure and facilities on the campus with an impressive built up area of 2.0 million sq. ft., with another 1.0 million sq.ft. under advanced stage of construction. This include teaching areas such as seminar halls, about 70 class rooms of different sizes ranging from 20 to 330 to cater to different teaching styles and needs, tutorial rooms, smart class rooms, discussion rooms, and wide, and airy circulation areas, world class research block with excellent research facilities, aesthetically designed library, student and faculty residential complexes, dining and recreational areas, a magnificent indoor sports complex and outdoor sports facilities available for the residents. Each classroom is fully equipped with projection system and Wi-Fi facility that allows use of institutional Learning Management System (LMS) Blackboard for contemporary teaching pedagogies using audio-visual media. The university also has large classrooms that are equipped with state of the art AV system & LCD TV in order to facilitate lectures through video conferencing.

The core of university's teaching philosophy is experiential and applied learning to compliment the class-room learning. To facilitate this, the university has excellent teaching labs in addition to research labs. It has a brilliant research infrastructure including a huge building, Research Block, with an area of 63000 sq.ft. which houses major research equipment and facilities for experimental research such as BSL II Culture facility, Flow cytometer with sorter, High Speed Centrifuge, Recombinant DNA technology Platform, REAL-TIME PCR, CO2 Incubator, Incubator shaker, Proteomics Platform, Fluorescence Microscope, Gel doc system, Elisa Reader & Washer, Electroporator/Micropulser, Nanodrop, Amaxa® Nucleofector®, Biospectrometer-kinetic etc. Additionally, it also has central instrumentation facility consisting of sample preparation and characterization facilities such as LCMS, XRD – Powder & Single Crystal, NMR, AFM, UV-VIS Spectroscopy, Impedance Analyzer, Photoluminescence, various furnaces, thin film deposition facilities including thermal and Pulsed Laser Deposition (PLD), and a 63 nodes, 1008 cores, 30 Tera Flops High Performance Computing Cluster (HPCC) for theoretical research work.

4.1.2 The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre etc., and cultural activities

Response:

Shiv Nadar University is a student-centric university. Student initiatives for extra-curricular activities are encouraged and supported by the university administration and there are about 30 active student clubs and societies, including technical societies and chapters of various professional bodies such as IEEE, SAE,

Page 52/124 23-10-2020 04:33:36

ASME, ACM, TEDx etc.

In addition to these cultural bodies, university also has a world-class sports infrastructure with 120000 sq. ft. of indoor sports complex, including facilities like basketball, badminton, and squash courts, athletic track, rock climbing walls and a huge gymnasium and 65000 sq.ft. of outdoor sports facilities having tennis, volleyball, and basketball courts and cricket, and football fields. A unique Sports League has been initiated by the student sports council and it organizes sports events throughout the year. All these clubs and societies, and sports activities have contributed immensely in creation of a vibrant co-curricular life on campus and is contributing to all-round development of students.

Specific details of the infrastructure for indoor and outdoor sports activities and extra-cultural activities are:

- 1. The **Indoor Sports Complex (ISC)** is an iconic building of the University which houses the following facilities:
 - 1. Squash Courts 4 Nos.
 - 2. Basketball Courts 2 Nos.
 - 3. Badminton Courts 8 Nos. (in Centre Hall, over Basketball Courts).
 - 4. Carrom Room 1 (with 4 sets).
 - 5. Yoga Room
 - 6. Unisex Gym having 35 machines and a Free Weight Section.
 - 7.TT Room with 4 TT Tables.
 - 8. Climbing Walls -2 Nos.
 - 9. Students' Activity Center The Student Activity Center (SAC) is housed under the Indoor Sports Complex and consists of various recreational facilities including but not limited to Foosball tables and Pool Tables, cafe services and the vending machines for snacks and beverages facilities.
 - 10. Class Room with projector with a seating capacity of 70.

About 50% students use the Indoor Sports Center facilities on a daily basis.

- 2. The **outdoor sports infrastructure** includes:
 - (a) Basketball Courts 3 Nos.
 - (b) Badminton Courts -2 Nos.
 - (c) Lawn Tennis Courts 2 Nos.
 - 1. Lawn Tennis Practice Wall Court 1
 - (e) Cricket Field 1
 - (f) Cricket Practicing Nets − 2 Nos.
 - 1.Football Field 1
 - 2. Volleyball Courts 2 Nos.

Besides, SNU must be probably one of the rare institution that boasts of an open air Chess Garden - an outdoor Chess Board with 4 feet high chessmen. It also has two smaller chess boards on raised platforms.

The University has organized the following major international and national level sports events since 2015 to promote sports among the student body:

- (a) HCL Junior Masters Tennis Championship 21-26 Nov 16.
- (b) HCL Junior Squash National Championship 24-28 Dec 16.
- (c) 68th Junior National Basketball Championship 04-11 Jun 17 (25 states participated).
- (d) HCL 74th Senior National Squash Championship 21-26 Aug 17.
- (e) HCL 2nd International Squash Championship 11-16 Dec 17.
- (f) Army Half Marathon 19 Mar 18.
- (g) National Cubing Event 07-08 Apr 18.

File Description	Document
link for additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 74

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 68.96

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
12300	22900	16900	17500	10700

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

The central library at the university provides the readers a conducing environment which is a synthesis of modernity and natural ambiance. It has an extensive collection of books, scientific and technical journals and electronic reference material, which is updated regularly. The Library and Information Centre consists of a Reference Section, Circulation Section, Audio-visual Section, Periodical Section, Book Bank, Digital Library, and a Reprographic Section for students. The library has different spaces designed to cater to individual and group studies including discussion rooms equipped with video conferencing and multimedia facilities. The library has 11435 e-journals, 20 online-databases and 169 institutional repositories etc. that its users can access through the library portal http://library.snu.edu.in. All e-resources can be accessed on campus through LAN as well as can be accessed remotely through Virtual Private Network (VPN) facility. OPAC/Web OPAC is the main tool to provide access to the library collection.

The SNU Library has subscription to online journals which are available for the faculty and students on Koha open source library management system. Koha includes modules for acquisitions, circulation, cataloging, serials management, authorities, flexible reporting, label printing, multi-format notices, offline circulation and much more.

- Name of the ILMS software KOHA
- Nature of automation (fully or partially) Fully
- Version– 3.08.01.002
- Year of automation 2011–12

Besides, the university library has membership of various consortium, professional and educational groups like E-Shodhsindhu, Shodhganga, INFLIBNET, DELNET, American Institute of Physics, European Mathematical Society, American Mathematical Society Institutional membership, ACM Digital Library, IEEE, ASME, ASCE, American Physical Society, Royal Society of Chemistry, American Chemical Society, American Society for Microbiology, MathSciNet, EBSCO, OUP database, JSTOR, CMIE, Emerald etc.

Some of the key highlights of the SNU library are:

- 1. It is centrally air conditioned.
- 2. Free WI-FI, internet access, free download and printout facility and Reprography service have been provided.
- 3. Library staff available at reference and helpdesk to support user's requirements.
- 4. New arrivals display section aims to update the status of arrivals.
- 5. Library has its children collection as well, which can be accessible for all user groups including

faculty spouses and children.

- 6. Library providing Inter-Library Loan service through DELNET.
- 7. Staff and student's publication collection.
- 8. Library has amenities such as drinking water, restrooms and cafeteria.
- 9. Users can submit their suggestions/grievances through library helpdesk which are forwarded to the Chairperson, Library Committee/Director Library Services for necessary action.
- 10. Users' orientation program is conducted for students and staff round the year.

File Description	Document
link for additional information	View Document

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resource for library enrichment

Response:

Shiv Nadar University Central Library was established in 2011 and is dedicated to continuously expand and enrich its collection with the quality books, reports, theses and other useful research resources.

The library has its special collection of HCL books donated by HCL-NCR Libraries.

The library also has rare books that were donated by Prof. Richard Lariviere, a renowned Indologist and the President of Field Museum Chicago. This collection has rare and ancient texts such as Dharma Kosha, Vedic books, rare editions of Dharma texts, Math, Science, and History etc. written in Sanskrit, Prakrit, Hindi, English, French, and German languages. Additionally, this collection has books on historical paintings and on the culture of India, France and other western countries.

The table below gives a summary of rare and special collection the university library has:

Sr. No.	Description	Total Collection
1	Rare Books	3,395
2	HCL Special Collection	15,412
3	Ph.D. Thesis	18
4	Dissertations/Project Reports	272

SNU Central Library has developed its own "Institutional Repository" which consists the Project Reports and thesis. Which can be accessed through SNU library portal http://dspace.snu.edu.in:8080/jspui/

File Description	Document
link for additional information	View Document

4.2.3 Does the institution have the following

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases

Any 4 of the above

Any 3 of the above

Any 2 of the above

Any 1 of the above

Response: Any 4 of the above

File Description	Document
Details of subscriptions like e-journals,e-	View Document
ShodhSindhu,Shodhganga Membership etc	

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 59.23

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
28.34	203.35	251.08	146.66	61.68

File Description	Document
Details of annual expenditure for purchase of books	<u>View Document</u>
and journals during the last five years	

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

4.2.6 Percentage per day usage of library by teachers and students

Response: 21.18

4.2.6.1 Number of teachers and students using library per day over last one year

Response: 496

4.2.7 E-content is developed by teachers:

- 1. For e-PG-Pathshala
- 2. For CEC (Under Graduate)
- 3. For SWAYAM
- 4. For other MOOCs platform
- 5. For NPTEL/NMEICT/any other Government Initiatives
- **6.For Institutional LMS**

Any 5 of the above

Any 4 of the above

Any 3 of the above

Any 2 of the above

Response: Any 3 of the above

File Description	Document
Details of e-content developed by teachers for e-PG-	<u>View Document</u>
Pathshala, CEC (UG)	

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Shiv Nadar University has created teaching, learning and community spaces around the campus which leverages technology significantly.

- It has deployed a High Performance Computing (HPC) cluster with 30 TeraFlops of Theoretical Peak Performance from a total of 62 Compute Nodes, to facilitate the complex research projects and computing simulations.
- The University has deployed Learning Management System "Blackboard" for online learning support to faculty and students. Faculty members can organize and publish course materials such as reference materials, handouts, reading lists, web links and activities etc. as well as posting assignments and conduction of quizzes etc. Students can also submit assignments electronically and work with a variety of built-in collaborative web-based tools.
- Server Virtualization for scalable and on-demand server/computing resource management and deployment

- High-end FAS storage solution which optimizes memory and I/O bandwidth for better performance while providing network connectivity and capacity scaling needed to meet growing and changing data storage requirements.
- ERP for student life cycle management covering processes like Admissions, Student Records, Grades, Student Financials, Academic Advisement, Campus Community, Payment Gateway etc.
- ITIL Based ticketing tool for Service Desk management
- Document Management System to maximize the value of University content
- Self-service portal for user account management
- The SNU Library has subscription to online journals which are available for the faculty and students on Koha open source library management system. Koha includes modules for acquisitions, circulation, cataloging, serials management, authorities, flexible reporting, label printing, multiformat notices, offline circulation and much more.
- The University has also deployed Intranet based video platform for e-learning which contains videos consisting of web courses and video lectures covering Engineering, Sciences, Technology, Management and Humanities. The entire content is hosted on local Intranet and is accessible from anywhere within the University (Academic blocks, library and Hostels)
- SNU has deployed G-suite for Education which is a package of multiple productivity tools for classroom collaboration which can be accessed from any web browser. It is a cloud based solution for messaging and collaboration and enables users to create, share and edit files in real-time, with consistent experience from any computer, tablet or phone.

The Information Technology Department provides the following basic IT services to all faculty members:

- Laptop or Desktop computer
- Email & Net ID
- Internet connectivity over LAN or Wi-Fi
- Secure Printing services
- Training for LMS, ERP and other associated applications
- e-Learning video platform
- Urkund, fully-automated system for handling plagiarism check. This is an e-mail based system that checks all submitted documents with no extra effort required on the part of the faculty
- High Performance Computing Cluster & other computing infrastructure/high-end workstations

Classrooms

- Classrooms in SNU are equipped with Projectors and projection screens
- Large Classrooms are equipped with Sound System

The University also has Smart Classrooms, Virtual Classrooms and Lecture capture facility. The lecture capture solution provides a powerful and stable video learning platform equipped with rich features and high quality video capabilities.

File Description	Document
link for additional information	<u>View Document</u>

4.3.2 Student - Computer ratio

Response: 0.7

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

?1 GBPS

500 MBPS - 1 GBPS

50 MBPS-250 MBPS

250 MBPS-500 MBPS

Response: 500 MBPS - 1 GBPS

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	<u>View Document</u>
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 1.56

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

INTRODUCTION

Shiv Nadar University (SNU) has well established system & procedure for maintenance and utilization of available assets and supporting facilities. Adequate staff is employed to meticulously plan and maintain hygiene, cleanliness and infrastructure on the campus so as to provide a congenial learning environment. Classrooms, office space, Seminar halls and Laboratories, etc are cleaned and maintained regularly by dedicated maintenance & Housekeeping team. Wash rooms and rest rooms are well maintained. Dustbins are placed in every floor. The Green Cover of the campus is well maintained by a full time gardener.

Electricity & Physical facilities: - Electricity and physical facilities related maintenance is to be carried out regularly as per schedule/ requirement. SNU have various equipment like, Diesel Generators, Electrical Transformers, Chiller plants, VRV units, Data centre, UPS, fire extinguisher, CCTV, Audio system, Digital Camera and Inverters, Fire alarm System, Sewage treatment Plant, Kitchen equipment, water purifier etc. Optimum working condition of all asset/ equipment on the campus is ensured through annual maintenance contracts (AMC) with OEM/ authorized service provider. Maintenance department has well defined PPM schedule of all machineries/equipment/panels etc based on OEM recommendations/ Technical manuals. Regular cleaning of water tanks, proper garbage disposal, pest control are done by dedicated team. For providing uninterrupted services, all critical equipment are connected in Parallel with UPS. The power supply of the academic and research building is also having dual power source. The DG set and power transformer is having redundancy.

Library:- Library is located adjacent of academic block and fully air conditioned. Library is partially computerised with UPS back up. Dedicated maintenance team periodically maintain the air-condition and electrical infrastructure as per scheduled PPM (periodic preventive maintenance). Pest control is being carried out on regular basis in library to maintain books safe from crickets and termites. Fire extinguisher is kept in library for any fire emergencies.

Laboratory: The laboratory infrastructure like power supply, air-condition system, UPS, water supply cleanliness etc are maintaining by maintenance team/respective AMC agencies. The lab equipment is maintained by equipment manufacturer/third party/lab assistants.

Class room/Seminar hall: All class rooms are air-conditioned and are equipped with OHP/LCD projector, Wi-Fi and Professors uses Collar mic as per the need. Seminar hall are equipped with additional audio Visual setup. Class room/seminar halls are well maintained by dedicated IT/ Maintenance/ housing keeping team.

Sport complex: The infrastructure of sport facility like flood lights, Air-condition in indoor stadium, Fire alarm system, beam detection etc are being maintained by respective AMC agencies and in-house maintenance team. All the sports equipment are maintained by the in-charge of SNU sports committee.

File Description	Document
Any additional information	<u>View Document</u>

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 0.24

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
8	1	4	6	2

File Description	Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 92.47

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14

5.1.3 Number of capability enhancement and development schemes –

- 1. Guidance for competitive examinations
- 2. Career Counselling
- 3. Soft skill development
- 4. Remedial coaching
- 5. Language lab
- 6. Bridge courses
- 7. Yoga and Meditation
- 8. Personal Counselling

7 or more of the above

Any 6 of the above

Any 5 of the above

Any 4 of the above

Response: 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	<u>View Document</u>
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 99.94

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2174	2161	2141	1582	980

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document

5.1.5 The institution has an active international students cell to cater to the requirements of foreign students

Response:

Shiv Nadar University believes in the age-old Indian philosophy that is exemplified in the Sanskrit word for a University – 'Vishwavidyalaya,' literally meaning a global school. We believe that we cannot be a world-class university without having a global outlook. It aspires to attract scholars and students from the whole world and want to create a campus that is truly a microcosm of different languages, cultures, ethnicities, and people of colors.

The international office at the University works on the following six broad areas, typically considered as indicators of internationalization:

- (i) Work closely with the departments and faculty members to secure international grants, and fellowships for our students, faculty, and the university;
- (ii) To create opportunities for international mobility of students and staff;
- (iii) To forge and drive international partnerships with credible foreign universities and other international agencies;
- (iv) To facilitate admissions of international/NRI students to various programs offered by the university;
- (v) To attract international researchers and scholars to Shiv Nadar University and facilitate their interaction with the university community and engagement in intellectual discourses; and
- (vi) To help SNU students, wanting to pursue higher studies abroad, secure admissions to programs/institutions that are best fit for their interests and abilities, thus creating a global brand for the university.

A comprehensive internationalization strategy was recently approved by the Executive Council of the university encompassing following seven broad areas including international student recruitment plan:

- 1. Proportion of international students
- 2. Proportion of students going for study abroad, international work experience, internship, service projects, volunteering etc.
- 3. Proportion of international faculty/staff
- 4. Proportion of research published with an international co-author
- 5. Proportion of research earnings from international sources
- 6. Proportion of students going for graduate studies abroad
- 7. International awards for faculty/staff/alumni/students

The International Office provides airport to airport i.e. from the arrival of foreign students till the completion of the program and departure to their respective home country, support to foreign students which include:

- 1. Issuing Visa letters and any supporting documents they may require
- 2. Sending a comprehensive handbook specifically designed for Foreign Students, that provides details on academics, visas, travel logistics, hostel accommodation, local environmental and cultural factors etc.
- 3. Academic advisement and support services
- 4. Active mentoring and counseling Services
- 5. Organizing events for international students
- 6. Provisioning a separate hostel block and dietary requirements

File Description	Document
Link for Additional Information	<u>View Document</u>

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes	
File Description	Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 53.5

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
210	303	183	268	0

File Description	Document
Details of student placement during the last five	<u>View Document</u>
years	

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 20.07

5.2.2.1 Number of outgoing students progressing to higher education

Response: 108

File Description	Document
Details of student progression to higher education	<u>View Document</u>

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 0

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
76	41	32	64	0

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOEFL/ Civil Services/State government examinations) year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five	View Document
years	

5.3 Student Participation and Activities

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

Response: 3

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	3	0	0	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

Shiv Nadar University (SNU) is a student-centric university and involves student representatives in various university committees that play an important role in managing student academic and extra-curricular life on campus.

SNU is one of the very few private universities that conducts student council elections in accordance to the Lyngdoh committee recommendations and has adopted presidential form of student governance with direct, online voting for central positions. Student & staff observers are appointed through the process of elections. The elected student council works with the university administration to ensure that all students reach their full academic, social and spiritual potential.

The student council is governed by a written constitution that is based on democratic values and the principle of self-governance for students. The Council is broadly divided into Executive Council and Senate with their roles and position explained as follows,

Student Senate: Senators representing every branch and department are elected annually. The Senate has the power to legislate or repeal any resolution, in order to maintain a healthy academic and co-curricular atmosphere within the University. The Senate, when it feels it is necessary, makes recommendations to formulate or amend any University policy, by passing a resolution.

Student Executive Council: The four directly elected office bearers viz. President, Vice President, Cultural Secretary and Sports Secretary, and six secretaries lead various student committees and deliberations. They work closely with the student community and the university administration for the welfare and well-being of the university community.

The student council, besides being responsible for organizing various cultural and sports activities including the annual techno-cultural-sports festival Breeze, has adequate representation in many important statutory and non-statutory committees such as:

Student Life Focused Groups: There are multiple focused groups each working on a specific aspect of student life on campus such as Hostel Maintenance issues, Entry/Exit system for the university, Student Activity Center, Food Delivery On Campus, Issues specifically related to graduate students (both Masters and PhDs), Gymnasium, Transport, Recreational Areas, and Annual festivals. These groups work with the university administration on a continuous basis.

Internal Quality Assurance Cell (IQAC) – Students have an active representation in the IQAC.

Student Affairs Coordination Group (SACG) – SNU Act and Statutes does not provide scope for student representation in certain statutory bodies such as Academic Council, and Executive Council. However, the Vice Chancellor has created SACG to ensure that student views are represented in such bodies. The SACG consists of the senior administrators such as the Deans, the Directors, and the President of the university as well as representation of the student council. The points raised by the students in these meetings are taken up at the appropriate statutory body.

Mess Committee – An active committee of students that is supported by faculty, staff and administration to manage the functioning of the dining halls and cafeteria on campus.

Library Committee

Proctoral Board

Sports Committee

Infrastructure Review Committee

File Description	Document
Link for Aditional Information	View Document

5.3.3 Average number of sports and cultural activities / competitions organised at the institution level per year

Response: 19.4

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
31	11	4	3	48

File Description	Document
Number of sports and cultural activities / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

The mission of the Shiv Nadar University (SNU) Alumni Relations Office is to interest, inform, engage, and organize alumni in the promotion and support of the University to create mutually beneficial relationships among alumni and with the University throughout the lives of alumni. Through increased engagement, alumni help SNU move forward and improve its position in the nation and the world.

Programs to engage & felicitate Alumni

1. Get involved

- 1. Alumni may volunteer for a talk for students for latter's benefit
- 2. Alumni may volunteer to become buddy to a SNU student for latter's better development
- 3. Alumni guides existing students for higher education path & practices
- 4. Alumni shares internship & job opportunities suitable of their organization for final year students with Career Development Center (CDC)
- 5. Alumni may buy merchandise or other items available in University campus

1. Reach To

- 1. Connect to Alumni Office at University for queries & support
- 2. Connect to faculty
- 3. Connect to Business units like admissions Deptt, HR for career @ SNU, CDC team for job openings in self's organization, etc. etc.
- 4. Registrar office for Degree/ transcript queries.

1. Benefits to Alumni

- 1. Invitation to annual Alumni day at University
- 2. Free subscription SNU news letter to life time member*
- 3. Invitation to all relevant Industry talk by eminent speakers
- 4. Invitation to participate in annual festival
- 5. Accommodation at subsidized cost for Alumni at University for Life time members*

Few hundred books have been donated by alumni to the University library. Many alumni visit campus round the year as part of the alumni connect program and help existing students with job opportunities, internships and to guide them on pursuing higher studies at best institutions globally.

File Description	Document	
Link for Additional Information	<u>View Document</u>	

5.4.2 Alumni contribution during the last five years (INR in Lakhs)

? 100 Lakhs

50 Lakhs -100 Lakhs

20 Lakhs -50 Lakhs

5 Lakhs -20 Lakhs

Response: <5 Lakhs

File Description	Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 6

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	2	4	0	0

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	<u>View Document</u>

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the University

Response:

The University has been established by the Shiv Nadar Foundation as a private University under an act of the State of Uttar Pradesh. The University's governance structure is designed to combine the statutory requirements of university administration stipulated in the enabling legislation and other relevant state and central government regulations, with the organizational structures and systems that ensure independent, autonomous and efficient governance of the University. The structure and processes of governance have been designed to ensure that decisions are taken through a process characterized by openness, transparency and inclusiveness.

The university believe in vision-driven self-governance, and have adopted a structure of participatory management and inclusive governance. The voices of all stakeholders are heard, and changes are brought about as a result.

There are two primary operational features of governance as needed in a global institution: First, there is an autonomy for continuous, internal professional assessment/review and accountability. Second, an essential in-built flexibility in all sections of the system exists, for implementing changes as and when required, to stay relevant in this fast-changing world. The university curriculum is already globally bench-marked, but continuous review of the curriculum, based on feedback and/or new knowledge, keeps it relevant. The same is true for our research agenda.

The University is governed by the Court (Board of Governors-- the highest advisory body), the Executive Council, the Academic Council, and has various supporting Committees, e.g.,

The following are the 'authorities' of the University as per the Statutes (relevant part given in the **attached** file):

- 1. Court
- 2. Executive Council
- 3. Academic Council
- 4. Asset Management Committee
- 5. Finance Committee
- 6. Planning Board
- 7. Nomination Committee

- 8. Board of Faculty
- 9. Admission Committees
- 10. Examination Committee
- 11. Disciplinary Committee
- 12. Proctoral Board.

Besides, the following committees with active faculty, students, and other internal and external stakeholders' participation drive the university policies and processes and works closely with the Internal Quality Assurance Cell (IQAC) of the university:

- Board of Studies for academic planning and accountability at every school
- Research Advisory Committee at the University level
- Alumni Engagement Committee
- Library Committee
- Placement Committee
- Purchase Committee
- Committee for Student Mentoring & Well-being (under the Dean-UG Studies, Dean-Graduate Studies & Dean-SW)
- Transport Committee
- Committee on Sensitization of Gender, Prevention and Redressal of Sexual Harassment as required by law.
- Faculty Development Center
- Institutional Bio-Safety Committee (IBSC), required by regulations to evaluate and certify projects involving rDNA work, tissue, blood and biological agents
- Institutional Ethics Committee (IEC) to evaluate projects on human research
- Committee on Internationalization, with all the School Directors, Dean-UG Studies & Dean-Graduate Studies as ex-officio members and the Director-International Affairs as the convener
- Student Council- It has been established to communicate student convictions efficiently to the faculty & staff

File Description	Document
Link for Additional Information	View Document

6.1.2 The institution practices decentralization and participative management

Response:

Shiv Nadar University works on the principles of participative management that allows faculty, staff and

Page 73/124 23-10-2020 04:33:50

students to take responsibility, accountability and authority for the work they are required to execute. The Shiv Nadar Foundation leadership has established a unique vision for the university with a clear mission and the university leadership has created a perspective plan and execution strategy under the framework of the institutional vision and mission.

Following processes are key part of the management practice at the university to encourage the participatory management at all levels in the organization:

- 1. Information sharing with the employees
- 2. Training and upskilling of the faculty and staff members
- 3. Decision making at the level of department, faculty and staff within the scope of approved budgets and/or processes.
- 4. Rewards system tied to performance

Case Study: Financial planning and management by way of annual budget preparation exercise

The financial planning and management by way of annual budget preparation exercise at the university is a great example of decentralized and participative management. The process starts in the third quarter of every financial year with the university finance officer sending a communication with a budget preparation template to all the academic and support services heads.

Every academic and non-academic department at the university prepares their respective "itemized estimates of all expenditures (Opex and Non-construction capex)" budgets, including the headcount requirements, after internal discussions and planning.

The university finance and HR offices meet with every department and undertakes detailed deliberations at smallest cost line level. The finalized budget is then presented to the Executive Council and subsequently to the Management Board and Trustees for final approval.

Once the budget is approved, individual departments are free to appropriate the amounts as per the established approval processes and financial matrices internal to the university.

Below is the process flow for the budgeting exercise:

Activity	Timeline	
Circulation of Files & Format Familiarization	3rd Quarter of FY	
Input Received - Target date	First Week of January	
Discussion with Department heads	Third Week of January	
Excel Sign Off (Final Numbers)	Before January end	
Discussion with Entity Heads	1st week of February	
Excel Review with CFO	1st week of February	
Finalization with Entity Heads	2nd week of February	

Final Review with CFO	2nd week of February
Budget presented to Chancellor/VC/EC	2nd week of March
Presentation to Management Board and Approval	2nd week of March

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

The university conducted "Vision to action" workshops in 2011 to create a perspective/strategic plan for 10 years covering academic structure, schools and departments, faculty recruitment and development, curriculum design, research and innovation, student recruitment and nurturing, internationalization, governance, campus and residential life etc. These workshops were attended by eminent academicians, researchers, and industry leaders from across the world and led to drafting of a strategic plan that envisioned the university to be a comprehensive, multi-disciplinary, research-focused and student-centric university.

Recently, Shiv Nadar University applied for "Institution of Eminence" status to the UGC and MHRD and has been recommended for the same by the Empowered Expert Committee. As part of the application, the university revisited the perspective plan and created a reinvigorated plan keeping in view the global ranking methodologies and requirements with an aim to feature in top 500 universities in next 10 years and among top 100 subsequently.

Based on a study conducted, SNU has benchmarked key metrics that The University aims to reach in order to achieve Top 500 in international rankings in the next 10 years and aim for Top 100 thereafter –

Theme	Parameter	Final Milestone
Multidisciplinary and	Number of new programs	165
Interdisciplinary	Number of new courses	4,950
International Faculty or Faculty	Proportion of International faculty (non-	42%
with International qualification	Indian citizenship)	
	Proportion of International faculty (non-	100%
	Indian citizenship + considerable time in	
	academics in a foreign country)	
International Students	Proportion of International students (%)	32%
Merit based selection	Proportion of scholarships offered to	15%
	meritorious (UG domestic)	
	Proportion of scholarships offered to	5%
	meritorious (UG International)	
Faculty student ratio	Faculty student ratio	7.69
	Proportion of regular faculty (%)	80%
	Proportion of faculty with PhD degree	100%
	repersion or running with ring degree	10070

Laboratory Facilities	Number of new research centres proposed	25
Research culture	Research publications/ faculty	5
	Citations per paper	8
	Citations per faculty	100
	Outputs in top 10% citation percentiles (%)	40%
	Grant/Faculty (INR lakh)	20
	Patents granted	200
	Total number of citation for University (SCOPUS)	45,000
	Number of research article published with at least one international co-author	50%
University collaborations	# university collaborations for teaching and research	100
	Number of MOUs for Joint Research/ visiting professorship	100
	% of students inbound	15%
	% of students outbound	30%
	% of faculty inbound	15%
	% of faculty outbound	10%
Source of funding	Proportion of research income (grants/ sponsored research etc.) in overall revenue	0.14
	Proportion of consultancy revenue in overall research income	2.1%
	Proportion of earnings from patents/ commercialization of IP in overall research income	0.11
	Amount of corpus fund (INR crore)	1,800
Library	Funds earmarked for library expansion (INR crore)	61.63
Accreditation	Number of domestic and international accreditations sought	0
Student enrolment	Total number of student enrolment	137845
	Number of undergraduate student	103,843
	Number of graduate students (PG + PhD.)	34,002
	UG: Graduate ratio	1.26
	Proportion of PhD. Candidates	0.2
	UG: PhD ratio	3.5

File Description	Document	
Any additional information	View Document	

6.2.2 Organizational structure of the University including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as

grievance redressal mechanism

Response:

The Act and the statutes of the University provide for the following Statutory Authorities of the University to provide policy framework and direction for the functioning of the University and for fulfilment of its objectives:

- The Court
- Executive Council
- Academic Council

The functions of various Committees/ Boards are defined in the University Act.

The University has a clearly defined organizational hierarchy and structure to support decision making processes that are clear and consistent with its purposes and supports effective decision making. The organizational structure lends itself to sustaining institutional capacity and education effectiveness through involvement of stakeholders in various Committees/ Boards.

Besides the Court, Executive Council and Academic Council, the following University bodies are constituted which evaluate monitor and recommend in respect of various matters related to Institutional Capacity, Review, Design and Evaluation of Course Curriculum; Education Effectiveness; Research; Examination and Evaluation etc. for sustaining Institutional Capacity and Educational Effectiveness:

- Finance Committee
- Planning Board
- Admission Committee
- Examination Committee
- · Boards of Studies

The roles and responsibilities of various bodies are well defined in order to ensure role clarity and accountability. The details of roles and responsibilities of various committees and leadership are given in the additional information as 6.2.2.

The Grievances of the faculty and staff are redressed timely to keep their motivation all time for their performance, efficiency and satisfaction.

File Description	Document
Link to Organogram of the University webpage	View Document
Link for Additional Information	View Document

6.2.3 Implementation of e-governance in areas of operation

1. Planning and Development

- 2. Administration
- 3. Finance and Accounts
- 4. Student Admission and Support
- 5. Examination

All 5 of the above

Any 4 of the above

Any 3 of the above

Any 2 of the above

Response: All 5 of the above

File Description	Document
Screen shots of user interfaces	<u>View Document</u>
ERP Document	View Document
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The meetings of various bodies /cells/committees are held as per the University Act/Statutes and Ordinances and under the overall framework of UGC regulations and guidelines. The registrar office at the university acts as the central repository of the minutes of the meetings and follows up with the relevant stakeholders for execution of the decisions taken in various meetings and submits the action taken reports in the subsequent meetings.

One of the activity that was successfully taken up by the Academic Council of the university was to improve academic standards and practices at SNU by constituting a Grading Policy and Practices Review Committee (GPPRC). The GPPRC reviewed the University's historical grading practices and recommended improvements to both grading practices and grading policies. The GPPRC's mandate was to:

- 1) analyze grading patterns in all courses taught at SNU
- 2) develop quantitative measures to describe key grading trends, including measures of grading averages, distribution and variability both within and across courses
- 3) recommend corrections, if any

4) recommend changes to grading practices and policies to ensure better consistency in grading practices across courses

The committee involved faculty members from across the schools and departments at the university and was facilitated by the Dean of Undergraduate Studies.

The Committee submitted its report to the Academic Council and recommended the following:

- The evaluation criteria should be clearly mentioned and communicated to the students.
- Regular feedback should be given to the students and they should know where they stand in terms of (expected) grade at mid-semester point.
- Based on the mid-semester feedback, instructors may give students additional assignments/tests to improve their performance.

The committee also laid down broad guidelines for evaluation in courses where testing is necessarily subjective.

In order to effectively grade courses that are subjective such as those offered by Humanities and Social Sciences departments, the committee recommended the following:

- a) The teaching aims and learning objectives of the course should be clearly stated and communicated to the students.
- b) Key transferable skills, both Cognitive and Practical should be clearly identified.
- c) The assessment rubric for the course should be derived from (a) and (b) above with clear weightage given to different aspects of (a) and (b).
- d) A process of Formative assessments should be inbuilt within the course with adequate, appropriate and timely feedback to the student.

The committee also recommended that courses with multiple sections could be run in modules. So if two instructors are co-teaching a course then the first instructor could teach his/her module to both the sections in the first half of the semester and then the second instructor teaches his/her module to both the sections in the second half. This was to ensure a fair and transparent framework for evaluation in such courses.

The committee's recommendations were accepted by the AC and helped streamline the university evaluation and grading policy.

File Description	Document
Link for Additional Information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

Employee's (Teaching and Non-Teaching staff) are recognized most valuable resource at the University. The University is committed to provide them a stable and healthy environment with equal opportunity for learning and growth. Following are the welfare schemes are run by the university:

- 1. An Equal employment opportunity and learning and growth.
- 2. Medical Insurance from one of the leading General Insurance Company for all employees and their dependents (As declared by employee).
- 3. Group Accidental Policy and Group Term Life policy for all employees to give them guaranteed protection in case of any mishappening.
- 4. University Lease Accommodation Scheme for faculty residing outside the campus.
- 5. Car Lease Scheme to support employees acquire a vehicle for smooth commuting, both for official and personal usages.
- 6. Mobile Reimbursement and Dongle / data-card is provided for internet access.
- 7. Wedding and New Born baby gift.
- 8. Maternity Benefit as per Maternity Act.
- 9. Paternity Benefit.
- 10. Transport Allowance.
- 11.7 Years Reward Scheme for Founding Faculty / members.
- 12. Retirement Benefits Provident Fund and Gratuity.
- 13. An opportunity to work after retirement as per UGC guidelines.

Apart from above list, the University provides following facilities on / in campus to its employees to keep their morale high:

- 1. University run transport to employees to commute to and from office.
- 2. Dedicated cabins for faculty and senior non-teaching staff and workstations for junior staff.
- 3. Furnished Campus Housing.
- 4. Bank facility.
- 5. ATM HDFC and PNB.
- 6. Post Office.
- 7. Indoor Stadium with world class facility.
- 8. Outdoor dedicated play area.
- 9. Lounge for recreational activity.
- 10. Shopping Mart.
- 11. Cafeterias and Dining Halls
- 12.24 hours power back up.
- 13. Crèche facility.
- 14. Clinic set up by Blue Circle Medi Services
- 15. Psychological counselling clinic.
- 16.Wi-Fi
- 17. Auditorium
- 18. Yoga Classes
- 19. Library access to family members of staff residing in-campus
- 20. University run School Bus for resident employee's children.
- 21. Weekly Shuttle / transport for employee's shopping / recreational places

6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years

Response: 4.75

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
14	10	9	6	0

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc during the last five years	View Document
Details of teachers provided with financial support to attend conferences, workshops etc during the last five years	View Document

6.3.3 Average number of professional development / administrative training programs organized by the University for teaching and non teaching staff during the last five years

Response: 1.4

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	2	1	2

File Description	Document
Details of professional development / administrative training programs organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 67.91

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
74	131	76	144	109

File Description	Document
Details of teachers attending professional	<u>View Document</u>
development programs during the last five years	

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

SNU provides a transparent and systematic framework for reviewing teaching and non-teaching staff's work in a positive and constructive manner: recognizing good performance, identifying areas of improvement, discussing needs and the support required from the University. It provides an opportunity for the staff member to put on record any difficulties or limiting circumstances faced that might have impacted their performance during the previous academic year. It is also an important input in ensuring that the University administration makes appropriate decisions with respect to annual Performance Based Salary Enhancements (PBSE). It is therefore a tool to enhance predictability and fairness in the decision making process with respect to staff's progression with the University.

Every employees' performance is assessed and reviewed for each academic year based on the laid down parameters:

Teaching Staff Parameters:

- 1. Courses Developed
- 2. Student Project/ Thesis Supervision (Completed/ On-Going)
- 3. Student Project/ Thesis Supervision (Completed/ On-Going)
- 4. Laboratories/Workshops/Studios Developed
- 5. Research/ Creative/ Performance
- 6. Sponsored Research/Creative Projects (Please mention Project Title, PI, Co-PI (if any), Funding Agency, Amount Sanctioned, Duration etc.)
- 7. Publications/ Exhibitions/ Performances
- 1. Research papers (Published/ Accepted in refereed journals)
- 2. Books (Authored/ Edited) and Films/ TV Shows (Produced/ Directed/ Edited or other contribution)
- 3. Exhibitions/ Performances/ Screenings (please specify individual or collective and whether competitively selected)

- 4. Chapters in Books
- 5. Literature/ Poetry/ Screenplays/ Other Creative Works
- 6. Conference/ Seminar papers
- 7. Papers/ Creative Projects submitted/ in progress
- 1. Intellectual Property Rights (Patents/ Copyrights/ Trademarks) Awarded/ Applied for
- 2. Future Research/ Creative/ Teaching Plans
- 3. Contribution to Administrative Committees in SNU
- 4. Contribution to Administrative Committees in SNU
- 5. Additional Contribution to Extra- or Co-Curricular Events/ Activities/ Proceedings at SNU
- 6. Organization of National/ International Conferences/ Meetings/ Workshops/ Festivals/ Exhibitions
- 7. Participation in National/ International Conferences/ Meetings/ Workshops/ Festivals/ Exhibitions
- 8. Lectures/ Performances outside SNU
- 9. Membership of Professional Boards/ Committees (non-SNU), Refereeing/ Judging for Publications, Projects/ Events (including Exhibitions/ Shows/ Festivals)
- 10. Awards/ Honors/ Fellowships

Non - Teaching Staff Parameters

- 1. Defined Key Performance Areas: This section attempts to capture the Key Performance Areas (KPAs) of the role performed by the appraisee in the year, and the results achieved against those KPAs
- 2. Performance Critical Success Attributes: This section identifies behavioral attributes that are important not only to the Institution but also critical for the appraisee's effectiveness. They form a platform for personal growth and highlight areas for development and coaching.
- 3. Appraisee Feedback.
- 4. Key Value Add from Appraiser.
- 5. Appraiser's Feedback.
- 6. Goal Settings for next review period.

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Institution and its parent body employ an internal audit team consisting of qualified chartered accountants and experienced audit personnel through which all the expenses and use of financial resources are monitored by the leadership. As a second level of check the finance team of the parent body, Shiv Nadar Foundation, further monitors all transactions.

This internal audit periodically reviews university's financial data from source system and checks it for completeness of all records. The Internal Audit Team checks all the transactions against the set procedures and guidelines under the university policies and ensures legal compliance of records. This exercise results into a quarterly report to the management and trustees. Comments/feedback received are forwarded to Finance Team for corrective action and implementation. The university finance office replies to the queries of the internal audit report and updates the processes based on the recommendations made by the internal

audit department.

The university has appointed one of the Big Four accounting firms to conduct statutory external audit. PricewaterhouseCoopers (PwC) was the external auditor for the duration FY 2013 to 2017 and KPMG has recently taken over from PwC. The university has also appointed KPMG to conduct GST audit required as per the GST Law.

List of Audits Since 2013:

- 1) Internal Audit: Internal Audit Team conducts periodic audits since inception
- 2) Statutory Audit:
- a. **PwC**: From FY 2013-14 to FY 2016-17
- b. **KPMG**: From FY 2017-18 onwards

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 1255.91

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
231.33	332.08	260.45	262.36	169.69

File Description	Document
Details of Funds / Grants received from non- government bodies during the last five years	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

The University follows financial prudence based on transparency, ethics and integrity and has adopted best practices from both public universities and corporate governance under the framework of Shiv Nadar University Act. The university Finance Committee and statutory offices such as Finance Officer and the Registrar play a key role in ensuring the system-wide optimal utilization of resources and overall financial prudency.

While Shiv Nadar University has been very fortunate on the account of the generosity of the Shiv Nadar

Foundation, it is time that it starts thinking about the sustainability of the university on the financial front. This is being done by engaging strategic partners that may vary from industry (Dell, ST Microelectronics, KPIT Cummins, etc.) to academia (Duke, Babson, University of Pennsylvania, Carnegie Mellon, etc.) & even to industry bodies (FICCI, CII, etc.). Other source of revenue could be philanthropic endowments by other organizations & alumni contributions or funding to various projects.

As we have a sprawling 286 acre campus that is located very close to Delhi-NCR, we could open our doors to the corporates that are present in our neighborhood. We could host conferences, workshops, etc. in our premises and it has the potential to become a great source of revenue. Due to the presence of excellent sports infrastructure, we have also started using our venues for hosting various national and international sporting meets.

Researchers are encouraged to apply for projects funded by various governmental & non-governmental agencies. Another mode of financial sustainability has arisen from intellectual property & consulting. If properly utilized & promoted, this would lead to the financial sustainability of the university in the coming years.

Another obvious resource & a crucial input for a great university, is human resource- finding & keeping the right kind of people engaged. Once we have the right kind of people at the University, our job is done. Our system will enable & empower them, to let them do what they do best, towards the vision & the mission of the University. This is a challenge in the higher education sector in the country.

We are working on a multi-pronged strategy to overcome these challenges. Our search for resources & talent is all over the world. The fundamental point is: "Excellence attracts Excellence", and so the seed has been chosen very carefully. There are no short-cuts to excellence, and the idea is to not to compromise, even if it takes a little bit longer. For the right kind of people, the challenge of this place should be the main attraction, & the work satisfaction the driving force.

Recently, the university has been recommended for an "Institution of Eminence" status and the following expected revenue in-flows were proposed as part of the 15-year financial strategic plan:

Details of year wise Expected Sources (for first 5 years) attached in additional information.

Details of calculations for Expected yearly Financial Resources (Beyond 5 years) is attached in additional information.

File Description	Document
Any additional information	<u>View Document</u>

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

Example 1: Global benchmarking of program and course outcomes

The IQAC as one of its first exercises conducted a comparative analysis of the learning outcomes of the programs and courses offered at Shiv Nadar University benchmarking them with few of the world's leading institutions, such as Stanford University, MIT and Boston University, and based on the discussions in the first IQAC meeting held on 31.03.2016 presented a proposal with the way forward through a sample course proposal form and SNU course proposal form. The proposal was implemented and the program/course outcomes were posted on the university's website and are updated time to time by each department of studies.

Example 2: Course evaluation feedback by the students

The university successfully implemented a systematic, anonymous, fully online, and comprehensive course evaluation survey, consisting of both quantitative and qualitative questions, for every course offered at the university. Students are required to take a snap survey in the middle of the semester to provide a quick feedback to the course instructor for any course correction, if required, and at the end of the semester covering almost every aspect of the course content and delivery. The results of the survey are shared with the respective faculty members after the grades have been submitted by them and the results are announced – to ensure fairness in the grading process.

The results of the survey are required to be submitted by the faculty members as part of their respective appraisal dossier and the Director of their respective school discusses the feedback results with each faculty member and suggest changes through counseling and sharing best practices. The university conducts teaching learning process workshops for faculty members under its Faculty Development center for a continuous improvisation in their pedagogical styles and for sharing of best practices among the faculty members.

Alumni also share their feedback periodically and contribute to improvement in curriculum, pedagogy and academic administration.

File Description	Document
Link for Additional Information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

The Shiv Nadar University IQAC undertakes Academic Administrative Audit periodically to review the existing processes, benchmarks them with the best practices from peer institutions as documented and published by NAAC as well as global best practices, and comes up with suggestion/s to improve existing processes or to establish new systems and processes.

Two such examples are:

1. Comprehensive audit to improve admission process

An IQAC internal audit committee conducts annual audit on admission process since the academic year 2017-18. This committee reviews the admission processes for both undergraduate, and graduate programs including PhD programs. The scope of this internal audit is to:

- 1. Review the systems and processes related to admissions including the eligibility requirements, standardized testing, conduction of interviews (wherever applicable), preparation of selection list and approval of candidates according to the predefined admission criteria
- 2. Review the scholarships/stipends policies and awarding the same to the candidates selected
- 3. Process improvisation and online maintenance of records such as copies of marks-sheets, certificates etc. obtained from selected candidates and their filing
- 4. Ensure the statutory compliances related to the admission process

The reports of the audit committee are shared with stakeholders and discussed in the IQAC meeting along with the responses and action taken on various observations of the audit committee. This ensures that the quality assurance strategies are reviewed based on the observations of the audit committee and effectively implemented.

2. Benchmarking of Key Performance Indicators (KPI's) with the peer institutions

As per the deliberations in various IQAC meetings the internal audit committee has evolved certain parameters on which the Key Performance Indicators (KPI)/Parameter are determined and a continuous monitoring is done on the following KPIs:

- Employability of the graduating students by conducting an annual analysis using number of jobs offered, number of companies visiting the university, percentage of students placed, average and median salary offered etc.
- Number of external academic, extra-curricular and sports awards won by the students
- Ratio of guest / visiting faculty to assess participation of industry /academia experts in the teaching learning process besides the regular academic resource
- International/domestic student ratio
- Doctorate to bachelors (Ph.D. to UG) students ratio
- Faculty with the doctorate degree
- Research/ grants /extramural funding and industry income from patent, technology transfers etc.
- International collaboration in academic pursuits
- Gender ratio on campus and percentage of students from disadvantaged section of the society
- No. of Papers published per faculty in International Refereed Journals

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 0.8

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	3	0	0	0

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
IQAC link	View Document

6.5.4 Quality assurance initiatives of the institution include

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
- 2. Academic Administrative Audit (AAA) and initiation of follow up action
- 3. Participation in NIRF
- 4.ISO Certification
- 5.NBA or any other quality audit

Any 4 of the above

Any 3 of the above

Any 2 of the above

Any 1 of the above

Response: Any 2 of the above

File Description	Document
Details of Quality assurance initiatives of the institution	View Document
Annual reports of University	View Document

6.5.5 Incremental improvements made during the preceding five years (in case of first cycle) Post accreditation quality initiatives (second and subsequent cycles)

Response:

The university has made substantial improvements in many areas. Few noteworthy achievements are:

- The university has created a Repository of Academic Resources by partnering with NPTEL
- Streamlining of examination system at the university through a standing examination committee
- Data collection for NIRF Rankings the university is the youngest in India to feature in top 50 rank
- Preparation of a 15-year strategic plan covering academic, research, faculty-hiring, admission, financial, internationalization planning as part of Institution of Eminence Proposal
- A comprehensive Research Promotion Policy has been created and is available on the website
- Conduction of periodic feedback surveys from different stakeholders
- Conduction of periodic internal Academic and Administrative Audit
- Introduction of Choice Based Credit System
- Initiating the Learning and Academic Support System to support slow-pace learners
- Faculty Mentoring System
- Professional Counselling System
- A comprehensive Internationalization strategy was created and is being implemented
- Program outcomes, course outcomes templates were designed and implemented across the university
- IT systems and processes such as LMS, ERP, and various online applications were designed and developed
- Extension activities were conducted in the neighboring village communities
- Consultancy policy was created and faculty members are encouraged to take up projects
- Corporate training initiatives have been started and executive training programs have been launched in partnership with couple of major industry partners
- Undergraduate research program was conceptualized and launched
- Various undergraduate Major and Minor programs were launched
- The university has stared Atal Incubation Center to encourage startups culture on campus
- Career Development Center works with students from the first year itself to make them industry ready
- Admissions process was streamlined and has been CRM based

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 21

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	5	3	3

File Description	Document
List of gender equity promotion programs organized by the institution	View Document

7.1.2 Institution shows gender sensitivity in providing facilities such as

- a) Safety and Security
- b) Counselling
- c) Common Room

Response:

Safety and Security

- Shiv Nadar University has taken the following measures to ensure the safety, security and well-being of all the members of the university community:
- Three-layer physical security posts At the main gate, inner gate and at the entrance of every hostel
- CCTV coverage Key access points of the campus and key common areas are under CCTV surveillance
- Online, biometric entry and exit system at the campus main gate
- Emergency contact information is displayed prominently throughout the campus
- Medical facilities with resident doctors, trained para-medical staff, dispensary, and 24x7 ambulance service are available on-campus
- Many faculty and staff members and senior administrators live on campus and are approachable by students
- Hostels have a comprehensive system of wardens, student mentors, and senior students led "family-system"
- All the buildings are designed keeping in view fire-safety rules and have fire-extinguishers and firealarms at every wing.

Mentoring and Counselling

- Faculty mentoring system at the university helps students on academic matters such as selecting a right course, a major-minor combination, or a specialization within a given major etc. Typically a faculty member has 12-13 student mentees.
- Faculty members work with the career development center at the university to guide students for higher studies options
- Departmental undergraduate and graduate advisors guide students on discipline specific queries and research opportunities

Besides academic counselling and mentoring, the university also provide professional counselling with active help from both psychologist and psychiatrist to students dealing with personal issues related to mental stress, depression, relationship issues, poor academic performance etc.

Common Areas

The university has designed the campus keeping a balance between socializing needs as well as privacy requirements. Each hostel has common areas that are equipped with recreational facilities. Indoor sports complex has many spaces designed keeping in view student well-being such as Yoga room, gymnasiums, and recently launched Student Activity Center that has state-of-the-art indoor sporting and gaming facilities.

Every academic block and the spaces between the academic blocks also have social spaces designed to cater to student and faculty needs. Many tuck-shops serving tea/coffee/snacks are also houses between these spaces.

7.1.3 Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 4.87

7.1.3.1 Annual power requirement met by renewable energy sources (in KWH)

Response: 486963

7.1.3.2 Total annual power requirement (in KWH)

Response: 9999999

File Description	Document
Details of power requirement of the university met by renewable energy sources	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 27.19

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 278.11

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 1022.94

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document

7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

Response:

- 1. Solid Waste Management: The university mainly has the following solid waste items food, paper, cardboards, plastic and some construction material. We are disposing off papers, cardboard packing and stationery items to authorized garbage recycling agency, whereas the construction generated waste material is diverted to landfills. We installed Organic Waste compactor (OWC) plant of capacity 400kg/day at University. The food waste from Dining hall and other tuck shops are processed here and are converted into organic manure that is used for on-campus horticulture.
- 2.Liquid Waste: The liquid waste generated in University is largely the sewage waste which is being treated through a Sewage Treatment Plant (STP). The STP had an installed capacity of 100kld in 2011 when the university started but since then has been enhanced to 650KLD plant in two different locations. The modular of 500KLD (100+200+200 KLD) Plant is installed and treating waste water from Academic and hostel zone and another 150KLD modular plant (50+100kld) is treating waste water from faculty housing zone. Both the plants are equipped with latest technology of treating waste water through MBR (Membrane bio reactor) system. The treated water is being used for irrigation purpose.
- 3.E Waste: The E- waste generated at the University mainly consists of used printers, cartages, computers, laptops, LED fixtures etc. that is being disposed through recycling vendors. SNU have life membership of disposal of hazardous waste under the hazardous wastes (Management, handling & trans boundary) rules, 2008 by Ministry of Environment and Forests and CPCB with certified vendor. The certified vendor is informed to collect e-waste materials on need basis.

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

The university puts water conservation to it's one of the top priorities and all the harvesting measures were included in the design phase itself. Shiv Nadar University is geographically located near wetland area and has a beautiful lake area adjoining it. Consequently, the water table in and around the campus is high which is between 1.5M and 2.7M in Monsoon and Summer seasons respectively. The conventional rain water harvesting techniques therefore does not work in this area due to high water table. The university has created a 13,000 KL capacity artificial lake, inside the campus, that is towards the opposite side of the natural lake. The rainwater from roof top and surface water are routed through underground drainage system to artificial and natural lakes. The water from artificial lake is then transfer it to natural adjacent lake during summers. This helps maintain the natural flora and fauna of the area.

7.1.7 Green Practices

- Students, staff using
- a) Bicycles
- b) Public Transport
- c) Pedestrian friendly roads
- Plastic-free campus
- Paperless office
- Green landscaping with trees and plants

Response:

The institution has been designed with an essence of "Go Green". The university is located on a 286 Acre lush green campus where almost 100 Acre area is dedicated to greens. The campus is covered with trees, grass and shrubs, and seasonal plants.

Use of bicycles

Students and faculty members staying on campus either use bicycles or walk to move from one block to another. The campus has cycle stands at various locations.

University Transport and car pool system

Most of the faculty and staff members commute to the university in the office transport system and the ones that do not avail this facility pool the vehicles for daily commuting.

Pedestrian friendly roads

The roads inside the campus as well the approach roads are provided with wide sidewalks. Thousands of trees, suitable for agro-climatic conditions, have been planted along the sidewalks. Every crossing has clear signage and road marks, speed-limits are appropriately highlighted wherever required and zebra-lines have been marked for safe pedestrian crossing. Security personnel regulate the traffic during rush hours.

Plastic free campus

Plastic is banned in the campus

Paperless office

Unless extremely necessary or mandated by the statutory requirements or legal compliances, the university uses electronic documentation alone. All communications to the faculty, staff and students are made through e-mails, LMS, and ERPs.

Green landscaping with trees and plants

The entire campus is extensively covered with trees, plants and well-maintained lawns. Green cover is around 80%.

Solar energy

The university generates 486963 KWH of solar energy that is about 4% of its annual power requirements.

Organic Waste compactor (OWC) plant of capacity 400kg/day is used to convert food waste into organic manure that is used for on-campus horticulture.

Sewage Treatment Plant (STP) of an installed capacity of 650 KLD and equipped with latest technology of treating waste water through MBR (Membrane bio reactor) system. The treated water is being used for irrigation purpose.

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0.83

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component yearwise during the last five years(INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
296.68	313.24	255.17	46.34	78.50

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

- 1. Physical facilities
- 2. Provision for lift
- 3. Ramp / Rails

- 4. Braille Software/facilities
- **5. Rest Rooms**
- 6. Scribes for examination
- 7. Special skill development for differently abled students
- 8. Any other similar facility (Specify)
- A. 7 and more of the above
- B. At least 6 of the above
- C. At least 4 of the above
- D. At least 2 of the above

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 4

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	1	1	1	1

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	<u>View Document</u>

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 23

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	6	4	6	6

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document	
Any additional information	<u>View Document</u>	

7.1.13 Display of core values in the institution and on its website

Response: Yes

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase	<u>View Document</u>
consciousness about national identities and symbols	

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct,

Page 96/124 23-10-2020 04:34:03

Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 10

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	7	2	1	0

File Description	Document
List of activities conducted for promotion of universal values	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

Events are an integral part of any institution and ours is no different, with students, faculties & staff coming from different backgrounds and all walks of life together we celebrate and form deeper bonds via these events, some of the events celebrated are mentioned below.

Lohri

Lohri commemorates the passing of the winter solstice and the starting of the harvesting season. Also marking the end of winter season, it is a traditional welcome of longer days as the Sun begins its journey to the Northern Hemisphere. SNU marks the arrival of the new harvest every year with a ceremonial bonfire amidst music, dance and truckloads of fun.

Diwali

Diwali symbolises the victory of light over darkness, knowledge over ignorance, and good over evil, hope over despair. The celebration of Diwali with lights is a reminder of the importance of knowledge, self-inquiry, self-improvement, knowing and seeking the good and the right path. We at Snu celebrate an ecofriendly Diwali by donning our traditional clothes, lighting diyas and dancing our hearts out.

Holi

Holi is celebrated to mark the triumph of good over evil, amidst music, colors and thandayi. Marking the arrival of spring, Holy brings forth an amalgamation of colors and merriment. SNUites celebrate Holi by

smearing some color and losing ourselves to the beautifully fun vibe that Holi brings along.

Independence Day

Snuites acknowledge the struggle of our freedom fighters and martyrs who won us our independence and celebrate Independence Day by hoisting Flag followed by distribution of sweets

Republic Day

As Independence Day in India is celebrated to mark the freedom of India from the British Rule, Republic Day is celebrated to commemorate the coming of its own constitution into force. To commemorate Republic Day, a flag hoisting ceremony is organized every year at the SNU flag post which is followed by distribution of sweets.

International Yoga day

Yoga is an invaluable gift of indian tradition and embodies unity of mind and body. Since its inception in 2015, International yoga day celebrates the practise of Yoga and its benefits to the well-being of the human body. The physical education department of SNU marks this day by organising a community yoga session in the Indoor Sports Complex.

Pongal

Pongal is celebrated on the day of the winter solstice, traditionally it is dedicated to the sun god Surya, and marks the beginning of the path north of the Sun from its southern end, a movement traditionally called Uttarayana

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Financial Transparency

- The balance sheets of the Shiv Nadar University and Shiv Nadar Foundation are audited by one of the big four auditing firms and are available in the public domain
- The fees structure of various programs is uploaded on the university website
- All the policies of the university are available on the internal web-portal and are available the members readily.

Academic transparency

- All the academic regulations and policies, curriculum, program prospectus, credit requirements etc. are posted and periodically updated on the university website.
- The academic and biographic records of the students are maintained on the institutional ERP and are available to them at all times.

• The university follows an interesting practice of answer-sheet "viewing day" for end-term examinations. Students can view their graded answer-sheets and contest/appeal if they are not satisfied with the marks awarded.

Administrative and Auxiliary functions

The university has an online portal to log suggestions, or register grievances related to administration, maintenance, or IT services related matters. An appropriate service ticket number is assigned to every query and the ticket is closed once the query is resolved. The whole process is tracked online and the customer (student/faculty/guest/staff) customer satisfaction is collected through a feedback mechanism.

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice – I

1. Title of the Practice

Opportunities for Undergraduate Research (OUR) Program

2. Objectives of the Practice

The larger aim of Opportunities for Undergraduate Research Program is to identify the advanced learners among the undergraduate students, train them to become the next generation of researchers and faculty members and to guide India to become global research and innovation hub.

The program is designed to:

- Expand opportunities for an active form of learning by students
- Encourage the interaction of undergraduate students with faculty
- Expand the level of research activity on the campus
- Help identify and train potential candidates for our graduate programs
- Demonstrate that teaching and research are compatible and mutually reinforcing
- Create a fast-track channel for bright undergraduates to enter directly into PhD programs

Students participating in the OUR program do **not** earn any credit for their degrees.

They should experience:

- A foundational understanding of how research is conducted in their disciplines
- A greater understanding of the information resources available and how to utilize these resources
- How to formulate research questions, and/or the fundamentals of experimental design
- How to interpret research outcomes

3. The Context

- a. SNU has been established as a multidisciplinary research university, which fosters research and innovation at all levels including in its *undergraduate* students. Consequently, all the undergraduate degree programs at SNU require students to conduct extensive undergraduate research projects.
- b. Indian higher educational institutions have a faculty shortage of about 35-40% by various estimates from UGC and MHRD. To prepare the next generation of qualified and quality researchers therefore is a national priority. SNU's undergraduate programs, therefore, have a sharp focus on preparing the next generation of researchers. All our undergraduate programs have a strong research component to prepare and motivate students to undertake post-graduate level studies as a stepping-stone to careers in research and higher education.
- c. At SNU, there is a University wide requirement that all undergraduates take at least 18 credits from courses that deal with Research, Experiential and Applied Learning (REAL). Through the REAL sequence, students have the opportunity to participate in research activity within the classroom/laboratory setting, through formal University research projects and/or through research internships in research and corporate organizations
- d. In each discipline in Engineering, Natural Sciences, Management and Humanities and Social Sciences, each student is required to undertake two semesters (one year) of undergraduate research, which is over and above the course work undertaken.

4. The Practice

OUR (Opportunities for Undergraduate Research) program enables undergraduate students undertake research projects with the faculty members outside the regular curriculum. These projects can be undertaken with any faculty member across the university and therefore opens up numerous possibilities for interdisciplinary work. In one of the projects, an electrical engineering student systemically studies and found geometric similarities in various classical dance forms in India under the supervision of a professor from performing arts department and presented this work at an international conference in the USA. Such projects help students understand the research methodology, analyze and solve complex problems that involve critical thinking, data handling and interpretation, and require critical writing abilities to be able to express themselves clearly and succinctly. Many undergraduate students have published their research work into high-impact peer reviewed journals through this initiative, list of select publications is given below.

Some of the key-features of the program are:

i) Participating students are required to submit a Statement of Qualification

Individual research projects by UG students under the **personal** guidance by a faculty member are encouraged and group projects by students are usually discouraged under this scheme.

Each undergraduate student participant and her/his faculty sponsor are to:

- Discuss their project
- Come to an agreement
- Submit a **one-page** application
- Describing their project and the personnel involved

The faculty sponsor is to

- Agree to supervise the work
- Certify the educational value of the proposed project

ii) Budgetary Support

Such undergraduate research uses existing equipment and software -- no capital equipment or software are to be purchased under this program. Consumables may be allowed against proper justification, but only up to a limit of INR 30,000 per project.

Proposals are evaluated based on:

- The student's academic accomplishments, and the faculty sponsor's link to the project topic
- Likelihood that the proposed project can be completed
- The educational value of the proposed project

iii) Final Report and Reflections

Each selected project must provide a Final Report (in the style of a journal manuscript, when appropriate) and Reflections

Final Reports & Reflections must be submitted by the student participant to the faculty sponsor.

Faculty sponsors must submit approved final reports and reflections before the end of the academic year.

iv) Undergraduate Research Conference

All OUR project participants present their results in an **Undergraduate Research Conference** held every year at the university campus during April/May. **Three awards** are presented to the top OUR projects: First Prize of INR 10,000, Second Prize of INR 7,500, and Third Prize of INR 5,000. Three categories of **Certificates of Appreciation** are also issued to deserving student participants.

v) Rewarding Channel of entry to Master's-PhD program

The University has a specially **rewarding** channel of entry in the graduate (Master's-Ph.D.) program for exceptional OUR students.

5. Evidence of Success

Some key successes of the program are:

- 1. About 400 projects have been supported by the university thus far with a budgetary outlay of Approx. INR 1.0 Crore.
- 2. About 300 projects have been completed thus far and another 130 active projects are going on. A year-wise summary of number of OUR projects awarded during last 4 years is listed below:

Academic Year	2014-15	2015-16	2016-17	2017-18	2018-19	
	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)	
No. of Projects	44	70	84	103	130	

3. The scheme has resulted into many research papers authored by undergraduate students published in refereed journals as well as in national and international conferences of repute. A summary of the research papers published in journals by undergraduate students through this initiative (student names are highlighted) is given below:

Authors	Title of the Article	Title of the Journal	Year	ISSN
Chauhan D., Agrawal G	,Biofilm formation by	RSC Advances	2018	20462069
Deshmukh S., Roy S.S.	"Exiguobacterium sp. DR11 and			
Priyadarshini R.	DR14 alter polystyrene surface			
	properties and initiate			
	biodegradation			
Ramu D., Garg S., Ayan	aNovel ?-carboline-quinazolinone	Biochemical	2017	62952
R., Keerthana A.K.	hybrids disrupt Leishmania	Pharmacology		
Sharma V., Saini C.P., Sei	ndonovani redox homeostasis and			
S., Pati S., Singh S.	show promising antileishmanial			
	activity			
Kumar S., Sambasivan	Smallest eigenvalue density for	Journal of Physics A:	:2017	17518113
B. , Anand S.	regular or fixed-trace complex	Mathematical and	1	
	Wishart-Laguerre ensemble and	Theoretical		
	entanglement in coupled kicked			
	tops			
Bakshi K., Ranjitha B	Novel complex of HAT protein	Scientific Reports	2017	20452322
Dubey S., Jagannadham J.	,TIP60 and nuclear receptor PXR			
Jaiswal B., Gupta A.	promotes cell migration and			
	adhesion			
Ghosh A., Shukla S.	,Sustainable Sulfur-rich	Scientific Reports	2016	20452322
Khosla G.S., Lochab B.	,Copolymer/Graphene Composite			
Mitra S.	as Lithium-Sulfur Battery			
	Cathode with Excellent			
	Electrochemical Performance			
Subash Sundar T., Sen	,	Physical Chemistry	2016	14639076
R., Johari P.	1 -	Chemical Physics		
	molecules for applications in			
	opto-electronic devices			
Balakumaran, S. E., Arus		Journal of Refrigeration,		23941952
	,Advanced Parabolic Receiver for	_	,	
Ramagopalan, A.	"Direct Steam Generation	Heating and Ventilation.		

Sundarraj, P., Maity, D.

6. Problems Encountered and Resources Required

NA

7. Notes (Optional)

Best Practice - II

1. Title of the Practice

Flexibility for Relevance in a Rigorous Undergraduate Curriculum

2. Objectives of the Practice

Shiv Nadar University has developed a unique multidisciplinary curriculum at the undergraduate level to provide students with an unprecedented, well-rounded education by synthesizing broad and strong multidisciplinary foundation with a solid training in their selected discipline. The objective of such a curriculum is to foster students' ability to integrate critical thinking, interpretive skills, scientific exploration and normative principles into their world-view and to prepare them for leading careers in a complex, changing, and unpredictable world that is continuously disrupted by the technological innovations. An engineer, for example, cannot be a successful problem-solver with just technological knowledge if s/he is not capable of understanding the *context* of the problem. Hence disciplinary education in silos has been replaced by an effective well-rounded education.

The curriculum is designed to be highly flexible so that every student could progress through the program at his/her own pace, charting out his/her own academic path and pace. Such flexibility was also designed to allow change of major during the course of their originally chosen program as per their interests and abilities thus providing an option of mid-trajectory correction for their career paths. This flexibility has allowed students to transcend disciplinary barriers by switching majors not just during their undergraduate program but even after they graduate and go for higher studies. This is a very good example of Choice Based Credit System of the UGC and the university was lauded by the UGC expert committee for having such flexible curriculum.

3. The Context

SNU was one of the first universities in India to identify the need for adopting a learner-centric approach that inculcates disciplinary depth as well as multidisciplinary, contextual breadth among the students, and prepares them to compete with the global talent pool. SNU therefore took a lead and created a flexible curriculum, from the very year of its inception (2011), that allowed students to study the courses/programs of their choice and to change program/institution, if they discover their interest during the course of the program elsewhere. This flexibility also allowed the university to integrate interesting inter-, and intra-disciplinary and value-added, skill-based courses in its curriculum.

4. The Practice

The undergraduate curriculum at SNU ensures that all students have a strong training in their selected Major, and at the same time have a broad understanding of the historical and contemporary issues that have shaped India and our world. Therefore, all students, whether they're studying Engineering, Arts or Sciences, must complete SNU's Core Common Curriculum designed to ensure that students have a breadth of learning, historical context and understanding of contemporary developments that are necessary to succeed in the 21st century. Students must take at least 18 credits in the Core Common Curriculum.

Core Common Curriculum (CCC)

All undergraduate students must take a core group of common subjects. The CCC is designed to provide students an understanding of the forces that are driving local, national, and global change and to give them an awareness of the problems facing an increasingly integrated world. All students at the University must take at least 18 CCC credits with a minimum of 3 credits from any six of the 8 Topic Areas within the CCC. The 8 Topic Areas in the CCC are:

- 1. Indian History and Society
- 2. World History and Society
- 3. Culture and Communication
- 4. Physical and Biological Systems
- 5. Cognition and Intelligence
- 6. Technology and Society
- 7. Environment and Ecology
- 8. Critical Reasoning and Analysis

Besides, all undergraduate students are required to take multiple electives outside of their Major, which provide an opportunity to students to discover their academic passion and enhance their engagement in the learning process through the individualization of their program of study. Students are required to take at least 18 credits in such University Wide Electives.

University Wide Electives (UWE)

All undergraduate students at SNU have the flexibility to choose multiple university-wide electives, providing them the opportunity to discover their academic passion and enhancing their engagement in the learning process through the individualization of their programs of study. Students must take a minimum of 18 UWE credits to fulfill their degree requirements, which may also be combined to fulfill the requirements of a Minor.

A robust system of undergraduate student advising / mentoring is an integral part of this practice of guided flexibility for relevance in the curriculum.

5. Evidence of Success

- The university is offering about 20 Minor programs at present ranging from Engineering, Natural Sciences, Humanities and Social Sciences, to Design, Art and Performing Arts, Communication etc.
- Certain Major-Minor combinations have proven to be a unique distinguisher for students to secure

- a job or to get admission for higher studies abroad in few of the world's best institutions. The percentage of students going to top institutions for graduate studies is higher for those with a Minor.
- Every undergraduate student at SNU is required to earn 42 credits under CCCs and UWEs such that a minimum of 18 credits are required in each one of them individually.
- About 200 unique Core Common Curriculum courses have been designed and offered by the faculty members at SNU and have seen a cumulative enrollment of more than 31,000.
- A table summarizing the number and percentage of students graduated in last 4 years that earned a **minor degree** is listed below. It shows that about one-third of graduated students earned a minor degree in last 4 years.

2015	2016	2017	2018	
No. of students 265	236	375	510	
graduated				
No. of students 100	72	143	140	
earning a minor				
% of students with a37.73	30.5	38.13	27.45	
minor				

Minors awarded	2015	2016	2017	2018	Total
Mathematics	13	13	17	35	78
Economics	23	4	45	3	75
Management		7	21	19	47
English	9	4	14	14	41
Communication	6	4	16	14	40
Design		19	8	3	30
Civil Engineering	7	10		8	25
Computer Science & Engineering	8	1	2	8	19
Electronics and Comm Eng	gg 15	1	1	2	19
Sociology		2	1	10	13
Physics	4		2	6	12
Biotechnology	4	1	3	1	9
Electrical Engineering	3			6	9
History		5	1	2	8
Chemistry			3	3	6
Mechanical Engineering	6				6
Dance		1	1	2	4
Economics & Mathematics		1			1
Big Data Analytics			1		1
Design & Sociology					0

Grand Total	98	73	136	136	443	

Major	Big	Bio-	Che	Civi	ilComm	Comp	Danc	Desig	Eco	EE	ECF	En ş	gHist	Mgm1	Math	Mec	Pł	1 5
		atech					e	n		E				•	S	h	y	•
Computer Science and	1	1			5		2		21	1	10	9	3	20	37			3
Engineering Mechanical		1		24	10	5	_	10	18	8	7	8	_	7	5		6	1
Engineering Electronics and Communi	•	1			8	12	1	10	22			16	1	13	23	1	1	+
cation Engineering																		
		1										ļ		1				
Civil Engineering		1			1			10			1	1		4	3	5	2	
Electrical Engineering		1			6	2			7			1	1	1	1	1	1	
Economics					2							3	1		5			(
Electrical and Electronics					6								1		1		1	

																	Ħ		Ť
Total	1	9	6	24	40	19	4	30	75	9	19	41	8	47	78	7	1	12]
Sociology									1				1						
Chemistry		2																	
History					1														2
English							1				1								2
Physics									1			1			3				
Engineering		2							1					2					
Mathematics Chemical		2			1				6			1		2					
Biotechnology			6									1					ĺ.	1	
Engineering																			

6. Problems Encountered and Resources Required

• Time tabling at times is challenging as the same course is a major for one student and can be university-wide elective for students from other departments.

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Creation of a Research and Innovation Ecosystem, Involving both Undergraduate and Graduate Levels of Studies

SNU is a research focused and innovation driven University, in that academic research in its broadest meaning, including basic and applied research, scholarly publications and creative expression, is the fundamental building block of the academic mission of the University.

All faculty at SNU are appointed, evaluated and promoted based on the contribution to research activity and all students, regardless of the discipline they're studying and regardless of whether they are undergraduate, post-graduate or doctoral students, are required to participate in research, scholarship or activity that produces new knowledge or creative works.

The University is characterized by its strong emphasis on interdisciplinary research, which actively engages faculty and students in addressing the most pressing problems faced by the world. Several research centers are engaged in such interdisciplinary work including the *Center for Public Affairs and Critical*

Page 108/124 23-10-2020 04:34:05

Theory, the Big Data Analytics Center, the Center of Informatics and the Institute for Innovations & Inventions with Mathematics and Information Technology.

The research focused nature of the university was lauded by the **UGC expert committee**, consisting of a distinguished team of academics and researchers from India such as **Prof. SK Joshi**, Fellow, Indian Academy of Sciences & National Academy of Sciences, Former Director General, CSIR, Padma and Shanti Swarup Bhatnagar Awardee; **Prof. GD Yadav**, Padma awardee and Vice Chancellor of Institute of Chemical Technology (ICT), which got NIRF Rank 1 in India in 2016; **Prof. Niharika Vohra**, Chairperson of The Fellow Programme in Management (FPM) at IIM Ahmedabad; **Prof. Mariappan Periasamy**, Central University of Hyderabad, Shanti Swarup Bhatnagar Awardee and alike.

The University takes pride that such an illustrious committee wrote about the research focussed nature of the university by mentioning (General Observations and Suggestions, page no. 11, UGC Expert Committee Report for Shiv Nadar University, point numbers have been kept similar to the report):

- "
- 2. Shiv Nadar University is a comprehensive, multi-disciplinary, student-centric, research university founded with ambitious plans in academic excellence to the best internationally recognized universities.
- 5. The university has spent significant amounts for creation of a conducive and enabling environment and has also provisioned for seed funding to encourage these faculty members.
- 6. The faculty members have published 88 books and/or chapters, 350 articles in refereed journals, 381 conference papers or presentations which is remarkable for a private university.
- 7. They have secured 40 extra-mural research projects with a funding of Rs. 12.2 Crores in a very short period of 4 years. (This was as of 27th April 2016, the updated figures as of date are 70 projects worth Rs. 30 Crores).
- 8. The publications include high impact, prestigious journals such as Nature and Nature Communications, Accounts of Chemical Research, Physical Review Letters etc. These demonstrate the quality of faculty and students.
- 9. The faculty members have also received many honors and awards in the last four years such as DBT Innovative Young Biotechnologist Award, INSA Medal for Young Scientists, DBT Ramalingaswami Fellowship, DST Inspire Faculty Award, etc.
- 11. The Opportunities for Undergraduate Research (OUR) program is enabling its undergraduate students undertake research projects with the faculty members outside the regular curriculum to publish their research work into high-impact journals.

,,

Some of the key parameters highlighting the institutional focus on research and innovation:

- % of Full Time Faculty with PhD or Post-Doctoral experience: About 85%
- Total no. of research papers published by SNU faculty members >5000

- Research output with SNU affiliation ~ 900 (Scopus)
- Amount invested in creation of conducive research infrastructure: Approx. Rs. 30 Crores
- No. of Full Time PhD students enrolled: About 200
- Stipend paid to SNU PhD students by the Shiv Nadar Foundation is highest in India
- More than 400 students have participated in Opportunities for Undergraduate Research (OUR) program and many of them have resulted into research papers by UG students
- Extramural research funding: About Rs. 30 Crores
- Externally sponsored projects: About 70 at present
- SNU is registered with Department of Scientific and Industrial Research (DSIR)— An acknowledgement of the fact that the university is a research institution

Awards and Recognitions for research and innovation

- The **UGC Inspection Report** on the University (available at https://www.ugc.ac.in/pdfnews/4993819_ShivNadarUniversity-Anx-II.pdf) is exceptionally encouraging, and the detailed testimony covered all the aspects of functioning of the University.
- NIRF Rankings 2018 the University is the youngest to feature in the 'top 50' amongst all the Indian universities
- The 'University of the Year' Award 2016 (Less than 10 years of existence) by FICCI (Federation of Indian Chamber of Commerce and Industry)
- Avant-Garde Institute of India Award by Confederation of Indian Industry (CII)
- The University's scholarly activities and their impact in the immediate neighbourhood and/or in the country and/or in the world reveal some **peaks of excellence** already, which have caught the attention of the media. For example:
 - A Chemistry faculty, **Dr. Gouriprasanna Roy** has designed and synthesized a compound that can reverse toxic mercury poisoning. Dr. Roy's team has been able to convert highly toxic, volatile and soluble organic mercury present in the environment into a safe and stable form that is rendered harmless and insoluble. This discovery, the first of its kind, can be potentially transformational from both health and environmental perspective.
 - A multidisciplinary (Mechanical Engineering and Life Sciences) team of researchers at the University has filed a patent on "An Apparatus and a Method for Processing Stainless Steel and an Improved Stainless Steel for Bioimplants Thereof", which is likely to have a huge impact.
- All the Departments in the School of Natural Sciences Mathematics, Chemistry, Life Sciences and Physics -- have now earned the prestigious **DST-FIST** (Fund for Improvement of S&T Infrastructure) grant.
- The University has been selected for hosting an 'Atal Incubation Centre' as part of the 'Atal Innovation Mission' of Niti Aayog. Out of 1719 academic & 1939 non-academic applications, Niti Aayog selected only 10 green-field institutions in the first round in 2017, and Shiv Nadar University has been sanctioned a grant of INR 8.8 crores.

5. CONCLUSION

Additional Information:

Shiv Nadar University can be characterized by **four pillars of strengths**, namely multidisciplinary, research focused, and student centric nature, and its emphasis on creating societal impact through science-driven policy making.

- 1. **Multidisciplinary Nature** SNU is a multidisciplinary, comprehensive university, by design, since its very inception. The University ensures students explore different subjects while pursuing specialization in a particular subject. This enables students to have a strong, broad-based foundation in spheres as diverse as humanities and social sciences, natural sciences, technology and engineering studies, arts, communication and management.
- 2. **Research & Innovation Focus** SNU is a research university, in that academic research in its broadest meaning, including basic and applied research, scholarly publications, and creative expression is the fundamental building block of the academic mission of the University. Strong emphasis on interdisciplinary research that cuts across academic programs, has allowed the University to break disciplinary silos and institutionalize a broad-based structure institutionalized through:
- Opportunities for Undergraduate Research (OUR) program
- Faculty appointments
- Interdisciplinary Research centres
- Research Plans placed within the framework of National Priority Areas such as:
 - Water Management / Ecology
 - Agriculture (research)
 - Energy
 - Health
 - Connectivity and Security,
- Incubation Centre and Patents
- **3. Student-Centric Learning** to cater to the varied learning styles and needs of individual students through:
 - Flexibility and industry relevance of the undergraduate curriculum
 - Center for Creativity and Design promoting project-based learning
 - Student mentoring and advising system
 - On-campus part-time job policy
 - Career development centre
 - Holistic development avenues
- **4. Societal Impact through Science-Driven Policy Making** SNU believes in Science-led Policy making in critical gap areas. It recently launched a Master's programme in **Water Science and Policy**, a first-of-its-kind programme globally, under the aegis of its Center for Public Affairs and Critical Theory (C-PACT), under the School of Humanities and Social Sciences (SHSS). This is a unique, multi-disciplinary research and training program on knowledge, governance and policy reforms on water.

Concluding Remarks:

Shiv Nadar University is dedicated to the discovery, development, organization, preservation, dissemination, and application of knowledge in a wide range of fields with the purpose of expanding the scale and scope of human understanding and contributing to the betterment of the world. The university is committed to excellence in teaching, research and service, and aspires to serve the higher education needs of India and the world beyond.

6.ANNEXURE

1.Metrics Level Deviations

	D Sub Questions		before and	after DVV	Verification	1	
1.4.1						Employers, 4) Alumni 5) Parents for	
	design and revi					1 3 4 7	
	Answer before DVV Verification : A. Any 4 of above						
		After DVV V					
1.4.2	Feedback proce	sses of the in	stitution ma	ay be classif	fied as follo	ws:	
	A 1	-C DVVV	7	. A To 11	1 11 4	1	
	feedback availa			: A. Feedba	ick collecte	d, analysed and action taken and	
				R Feedback	k collected	analysed and action has been taken	
	Remark : As			B. Peedbac	k conecieu,	analysed and action has been taken	
	Kemark . As	ciarrica by	11121.				
2.3.2	Percentage of to	eachers using	ICT for eff	ective teach	ning with Le	earning Management Systems (LMS),	
	E-learning reso	_			J	, , , , , , , , , , , , , , , , , , ,	
	2.3.2.1. Nun		_				
	Answer b	efore DVV	Verification	: 166			
	Answer a	fter DVV Ve	erification: 1	165			
	Remark: Th	e HEI has no	ot supported	the link of	the teachers	s using ICT facilities	
2.4.4	D	-11 4 41			1	Con College Line of Class New 1	
2.4.4	_					ion, fellowships at State, National,	
	international le	vei iioiii Gov	emment, re	cogmsed be	dies during	the last five years	
	2 4 4 1 Nun	her of full ti	me teachers	receiving a	wards from	state /national /international level	
	from Governme			_			
		efore DVV			ng the last i	iive yeurs	
	2017-18		2015-16	2014-15	2013-14]	
						-	
	2	7	3	5	3		
	Answer A	After DVV V	erification :		1	7	
	2017-18	2016-17	2015-16	2014-15	2013-14		
	1	4	3	4	2	1	
		7	3	7	4	J	
	D 1 D		41. 1 1		II		
	Kemark : Re	vised based	on the clarif	ication by F	1Cl		
2.5.1	Average number	Avarage number of days from the date of last semester and/year, and eveningtion till the declaration					
2.3.1	_	Average number of days from the date of last semester-end/ year- end examination till the declaration of results during the last five years					
	or results during	ig the last HV	c years				
	2.5.1.1. Nun	ber of days	from the dat	te of last ser	nester-end/	year- end examination till the	
	declaration of r	-				y	
					,		

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
6	12	19	16	20

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
7	11	19	16	20

Remark: The Report of Controller of Examination is not an authorised document

- 3.1.2 The institution provides seed money to its teachers for research (average per year)
 - 3.1.2.1. The amount of seed money provided by institution to its faculty year-wise during the last five years(INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
833.47	980.78	907.87	354.68	1629.74

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
833.46	980.77	907.87	354.68	1629.74

Remark: Sanction letter of seed money is not provided

- Number of teachers awarded international fellowship for advanced studies/ research during the last five years
 - 3.1.3.1. The number of teachers awarded international fellowship for advanced studies / research year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
8	10	7	9	3

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
6	7	1	2	1

Percentage of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other similar recognition by government agency

3.1.6.1. The Number of departments with UGC-SAP, CAS, DST-FIST ,DBT,ICSSR and other similar recognition by government agency

Answer before DVV Verification: 7
Answer after DVV Verification: 7

3.2.2 Grants for research projects sponsored by the government sources during the last five years

3.2.2.1. Total Grants for research projects sponsored by the government sources year-wise during the last five years(INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
899.19	1200.04	632.15	434.39	570.81

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
568.14	402.37	377.72	261.07	36.17

Remark: Corrected as per the revised statement attached

- Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years
 - 3.3.3.1. Total number of awards for innovation won by institution/teachers/research scholars/students year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
2	3	6	4	3

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	1	0	0

Remark: Other awards claimed previously

- 3.3.4 Number of start-ups incubated on campus during the last five years
 - 3.3.4.1. Total number of start-ups incubated on campus year-wise during the last five years Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
6	8	4	0	0

2017-18	2016-17	2015-16	2014-15	2013-14
1	7	0	4	0

Remark: Insufficient document support. The University letter does not specify the start-ups incubated and has not provided letters for the rest of the years

- 3.4.4 Number of Ph.D.s awarded per teacher during the last five years
 - 3.4.4.1. How many Ph.Ds are registered within last 5 years

Answer before DVV Verification: 18 Answer after DVV Verification: 00

3.4.4.2. Number of teachers recognized as guides during the last five years

Answer before DVV Verification: 138 Answer after DVV Verification: 00

Remark: Supporting link is not working. The supporting list is not acceptable. No PhD Award letters/provisional certificate of students and Guideship letters of research supervisor provided

- 3.5.2 Revenue generated from consultancy during the last five years
 - 3.5.2.1. Total amount generated from consultancy year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
32	4	3.2	15.1	0

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

Remark: No copies of letters of consultancy amount generated provided. Unable to accept the statement signed by principle

- 3.5.3 Revenue generated from corporate training by the institution during the last five years
 - 3.5.3.1. Total amount generated from corporate training by the institution year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
105.93	5.60	5.55	0	0

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
105.93	5.60	5.55	0.00	0.00

Remark : The supporting statement does not have any indication of the revenue generated by Corporate training

- 3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year
 - 3.7.1.1. Total number of Collaborative activities for research, faculty exchange, student exchange year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
7	4	6	1	3

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
7	4	3	1	3

- 4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.
 - 4.1.4.1. Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
12300	22900	16900	17500	10700

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
123.00	229.00	169.00	175.00	107.00

Remark: Though the statement is signed by the principal, it is not duly certified by any chartered accountant nor supported by an abstract from the audited statement of account i

- 4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)
 - 4.2.4.1. Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
1				

28.345 53.065	98.785	65.741	50.230	
---------------	--------	--------	--------	--

2017-18	2016-17	2015-16	2014-15	2013-14
28.34	53.06	98.78	65.74	50.23

Remark: HEI initial claim accepted. Cross checked NIRF and SSR

- 4.2.7 E-content is developed by teachers :
 - 1. For e-PG-Pathshala
 - 2. For CEC (Under Graduate)
 - 3. For SWAYAM
 - 4. For other MOOCs platform
 - 5. For NPTEL/NMEICT/any other Government Initiatives
 - 6. For Institutional LMS

Answer before DVV Verification: Any 4 of the above Answer After DVV Verification: Any 3 of the above

Remark: Revised as per link provided

- 4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years
 - 4.4.1.1. Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
530	463	379	241	201

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
529	464	379	241	201

Remark: Though the statement is signed by the principal, it is not duly certified by any chartered accountant nor supported by an abstract from the audited statement of account is not produced

- Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years
 - 5.1.2.1. Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
2082	2035	1762	1484	947

2017-18	2016-17	2015-16	2014-15	2013-14
2081	2035	1762	1484	947

Remark: The supporting research guide list has not relevance to the Metric

- 5.1.3 Number of capability enhancement and development schemes
 - 1. Guidance for competitive examinations
 - 2. Career Counselling
 - 3. Soft skill development
 - 4. Remedial coaching
 - 5. Language lab
 - 6. Bridge courses
 - 7. Yoga and Meditation
 - 8. Personal Counselling

Answer before DVV Verification : 7 or more of the above Answer After DVV Verification: Any 6 of the above

Remark: Revised as per supporting documents

- Average percentage of students benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years
 - 5.1.4.1. Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
2176	2163	2142	1583	980

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
2175	2162	2142	1583	980

Remark: No proper Reports of events or brochures, syllabus provided

- 5.2.1 Average percentage of placement of outgoing students during the last five years
 - 5.2.1.1. Number of outgoing students placed year-wise during the last five years Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
210	303	183	268	0

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

Remark: No supporting placement of outgoing students provided by the Placement Cell

- 5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)
 - 5.2.3.1. Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
76	41	32	64	0

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

5.2.3.2. Number of students appearing in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOEFL/ Civil Services/State government examinations) yearwise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
76	41	32	64	0

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

Remark: No pass certificates provided. No evidence of students appeared

Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) during the last five years

5.3.1.1. Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
20	53	28	2	7

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	3	0	0

Remark : No certificates of award uploaded. Only 3 awards can be considered based on Excel support

5.4.2 Alumni contribution during the last five years (INR in Lakhs)

Answer before DVV Verification: 5 Lakhs -20 Lakhs

Answer After DVV Verification: <5 Lakhs

Remark: The Sundry creditors are highlighted in the statement of accounts for alumni contribution which is not acceptable

- Average number of professional development / administrative training programs organized by the University for teaching and non teaching staff during the last five years
 - 6.3.3.1. Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
2	2	2	3	3

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

Remark: No relevant supporting document

- Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years
 - 6.3.4.1. Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
75	130	76	144	109

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
74	131	76	144	109

Remark: Insufficient supporting documents

- Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)
 - 6.4.2.1. Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
23133	33208	26045	26236	16969

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
00	00	00	00	00

Remark: No originals, no documents matched with the excel sheet values

- 7.1.1 Number of gender equity promotion programs organized by the institution during the last five years
 - 7.1.1.1. Number of gender equity promotion programs organized by the institution year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	5	3	3

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
3	1	2	0	0

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

7.1.8.1. Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
296.68	313.24	255.17	46.34	78.50

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
296.67	313.25	255.17	46.34	78.50

Remark: No supporting abstract for the expenditure on green initiatives

- 7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:
 - 1. Physical facilities
 - 2. Provision for lift
 - 3. Ramp / Rails
 - 4. Braille Software/facilities
 - 5. Rest Rooms
 - 6. Scribes for examination
 - 7. Special skill development for differently abled students
 - 8. Any other similar facility (Specify)

Answer before DVV Verification : A. 7 and more of the above Answer After DVV Verification: C. At least 4 of the above

Remark: Revised as per supporting documents

Number of Specific initiatives to address locational advantages and disadvantages during the last five years 7.1.10.1. Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

Answer before DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0	1	2	2	1

Answer After DVV Verification:

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

Remark: Supporting link has no input

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

	Answer before DVV Verification : Yes Answer After DVV Verification: No						
	Remark : No relevant information uploaded						
7.1.13	Display of core values in the institution and on its website						
	Answer before DVV Verification : Yes Answer After DVV Verification: Yes Remark : accept HEI claim						
7.1.17	Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love,						
	i i						
	Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years 7.1.17.1. Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years						
	Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years 7.1.17.1. Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years Answer before DVV Verification:						
	Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years 7.1.17.1. Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years Answer before DVV Verification: 2017-18 2016-17 2015-16 2014-15 2013-14						
	Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years 7.1.17.1. Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years Answer before DVV Verification: 2017-18 2016-17 2015-16 2014-15 2013-14 10 7 2 1 1						

2 Extended Profile Deviations

2.Extended Profile Deviations
Extended Profile Deviations
No Deviations