Evaluative Report of School of Basic Science and Research (SBSR)

1. **Name of the Department** : Environmental Sciences

2. **Year of establishment** : 2013

3. **Is the Department part of a School/Faculty of the university?**
   Yes /SBSR

4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt. etc.)**
   M.Tech. and Ph.D.

5. **Interdisciplinary programmes and departments involved**
   NA

6. **Courses in collaboration with other universities, industries, foreign institutions etc.**
   NIL

7. **Details of programmes discontinued, if any, with reasons**
   NO

8. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**
   Semester

9. **Participation of the department in the courses offered by other departments.**
   M.Tech. (Env.Engg.); B.Tech; BCA; B. Sc.

10. **Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others):**

	Sanctioned	Filled	Actual (including CAS&MPS)
Professor			**Nil**
Associate Professors			**1**
Asst.			**1**
Others			**-**

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4 years
Dr. Rajesh Kumar	**Ph.D., M.Sc. (Tech.), DYSC**	**Associate Professor**	**Geophysics (Meteorology)**	**15 Years**	**Nil**
Dr. Suman	**Ph.D., M.Sc.**	**Assistant Professor**	**Environmental Science**	**7 Years**	**Nil**

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors
NA

13. Percentage of classes taken by temporary faculty–programme-wise information:
NA

14. Programme-wise Student Teacher Ratio

15:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

01

16. Research thrust areas as recognized by major funding agencies

Glacier Research, Climate Change and Glacial melt water runoff modeling, Air Pollution, Remote Sensing and GIS

17. Number of faculty with ongoing projects from (a) national; (b) international funding agencies and (c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Sponsored Projects (*ONGOING*) with Dr. Rajesh Kumar

Nature of Project	Title of Project	Capacity	Name of Funding Agency	Value of Project	Duration (months)
Major Project	Contribution to High Asia Runoff from Ice and Snow (CHARIS)	Principal Investigator (PI)	United States Agency for International Development (USAID), USA	$112,100	48
Major	Snout Monitoring,	Collaborative (4 partners)	₹ Dept. of Sc. &	19,61,800	48

Project	Mapping, Mass and Energy Balance and Assessment of Biophysical Environment of Naradu Glacier, H.P.	PI of own component complete budget = ₹ 1,01,00,000	Technology (DST), New Delhi, India		

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration

Project Title	Collaborators	Associated ₹rant	Funding Agency
Snout Monitoring,	1. State Council for Science Technology and Environment, Shimla	1,01,00,000	Dept. of Sc. & Technology (DST), New Delhi, India

Mapping, Mass and Energy Balance and Assessment of Biophysical Environment of Naradu Glacier, H.P.	2. Sharda University, Greater Noida 3. Snow Avalanche Studies Establishment, Chandigarh 4. National Bureau of Plant Genetic Research, Shimla		

b) International collaboration

Project Title	Collaborators	Associated Grant	Funding Agency
Contribution to High Asia Runoff from Ice and Snow (CHARIS)	1. University of Colorado, USA 2. Sharda University, Greater Noida, India 3. Kathmandu University, Kathmandu, Nepal	$112,100	United States Agency for International

			Development (USAID), USA

19. **Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.**
NIL

20. **Research facility/centre with State recognition National recognition International recognition**
NIL

21. **Special research laboratories sponsored by/created by industry or corporate bodies**
NIL

22. **Publications:**

* **Number of papers published in peer reviewed journals(national/international)**
34

* **Monographs**

* **Chapters in Books:** 25

* **Edited Books**

* **Books with ISBN with details of publishers**

* **Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.)**
35

* **Citation Index–range /average**
  0-61 /18.8

* **SNIP**
* **SJR**
* **Impact Factor–range/average**
  0.46-6.1/2.05

* **h-index**

23. Details of patents and income generated
NIL

24. Areas of consultancy and income generated
NIL

25. Faculty selected nationally/internationally to visit other laboratories/institutions /industries in India and abroad
11

26. Faculty serving in

a) National committees (b)International committees (c)Editorial Boards d)any other (please specify)

Member Editorial Board, International Journal of Applied Environmental Science & Technology, published by national printer & publisher, New Delhi
Managing Editor, Journal of Scientific and Technical Research, published by Sharda University, Greater Noida, Delhi NCR

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).
Special Lectures (every 1st & 3rd Saturdays during Semester)

28. Student projects

- **Percentage of students who have done in-house projects including inter-departmental projects**
  50%
- **Percentage of students doing projects in collaboration with other universities /industry/institute**
  50%

29. Awards/recognitions received at the national and international level by

- **Faculty :** NIL
- **Doctoral/post doctoral fellows**
- **Students**

30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any

(i) Joint Convener, "World Earth Day-2015" on 22nd April, 2015 at Sharda University, Greater Noida; Funding- Sharda University

(ii) Organised "SANLAYAN 2013 – a Talent Hunt" program of Sharda University organised on November 16, 2013 at Sharda University, Greater Noida, India; Funding- Sharda University

(iii) Co-Convener, International Conference on "Multifunctional Materials Energy and Environment" held during August 21-23, 2013 at Sharda University, Greater Noida, India; Funding- DST, DRDO etc.

(iv) Organised, "World Earth Day-2013" on 22nd April, 2013 at Sharda University, Greater Noida, Funding Agency: Ministry of Earth Sciences, Govt. of India; Funding – Ministry of Earth Science

(v) Organised, "Workshop on Positive Degree Day Modelling of Glaciers" during 28th -29th September, 2012 at Sharda University, Greater Noida; Funding Agency: South Asia Water Initiative (SAWI), Abu Dhabi Dialogue Knowledge Forum, Small Grants Programme (ADDKFSGP)through ICIMOD, Nepal

(vi) Organising Secretary, "National Conference on Semiconducting Materials and Nano Devices", during September 14-15, 2012, RTDC, Sharda University, Greater Noida, India

(vii) Organising Secretary, "National Seminar on Futuristic Materials for Device Applications" on July 27, 2012 organised by Research and Technology Development Centre, Sharda University and Sponsored by Defence Research and Development Organization, New Delhi

(viii) Organised, "World Earth Day- 2011" on 22nd April, 2011 at Sharda University, Greater Noida, Funding Agency: Ministry of Earth Sciences, Govt. of India; Funding – Ministry of Earth Science

31. Code of ethics for research followed by the departments

Code of Ethics for Research should respond to a changing climate of research with the intent of:

(i) Showing due respect to all who are part of the research,

(ii) Respecting the values of truth, fairness and open democracy,

(iii) Upholding the integrity of a discipline, and

(iv) Carrying out the mode of enquiry of research.

Code of Ethics for Research should strive to maintain:

(i)The integrity of social/linguistic/medical/biological enquiry

(ii)The freedom to research

(iii)The freedom to publish and disseminate the results of their research.

32. Student profile programme-wise:

Name of the (refer to question no.4)	**Applications received**	**Selected**		**Pass percentage**	
		Male	**Female**	**Male**	**Female**

33. Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities with in the State	% of students from universities outside the State	% of students from other countries
M. Tech.	0%	60%	40%	0%
Ph.D.	12.50%	50%	25%	12.50%

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

NIL

35. Student progression

Student progression	Percentage against enrolled
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	20%
Ph.D. to Post-Doctoral	NA
Employed 31. Campus selection 32. Other than campus recruitment	 NA 80%
Entrepreneurs	NA

36. Diversity of staff

Percentage of faculty who are graduates	
Of the same university	0%
From other universities within the State	50%

From universities from other States	**50%**
from universities outside the country	**0%**

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period
NIL

38. Present details of departmental infrastructural facilities with regard to

a) **Library**
Yes

b) **Internet facilities for staff and students**
Yes

c) **Total number of classrooms**
01

d) **Classrooms with ICT facility**

e) **Students' laboratories**

f) **Research laboratories**
01

39. List of doctoral, post-doctoral students and Research Associates

a) **From the host institution/university**

b) **from other institutions/universities**
07

40. Number of postgraduate students getting financial assistance from the university.
05

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
NIL

42. Does the department obtain feedback from?

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

We discuss the feedback in faculty board and improve the syllabus and get it approved through executive council.

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

We share the students feedback in faculty meeting provide suggestions for improving the teaching-learning-evaluation process for betterment of education system.

c. Alumni and employers on the programmes offered and how does the department utilize the feedback? NIL

43. List the distinguished alumni of the department (maximum10)

- Ms. Himanshu Chaudhary
- Ms. Jagjeet Kaur
- Mr. Rajat Kumar
- Mr. Moh. Shoaib
- Mr. Madhulika Singh

44. Give details of student enrichment programmes (special lectures /workshops /seminar) involving external experts.

(i) "World Earth Day-2013" on 22nd April, 2013 at Sharda University, Greater Noida, Funding Agency: Ministry of Earth Sciences, Govt. of India

Guest Lecture by

Dr. J. V. Singh, Scientist E, Ministry of Earth Science, PrithviBhawan, New Delhi

(ii) "Workshop on Positive Degree Day Modelling of Glaciers" during 28th -29th September, 2012 at Sharda University,

Greater Noida, Funding Agency: South Asia Water Initiative (SAWI), Abu Dhabi Dialogue Knowledge Forum, Small Grants Programme (ADDKFSGP)

Guest Lecture by

a) Dr. Rijan Bhakta Kaystha, Associate Professor, Kathmandu University, Kathmandu Nepal

(iii) "World Earth Day- 2011" on 22nd April, 2011 at Sharda University, Greater Noida, Funding Agency: Ministry of Earth Sciences, Govt. of India

Guest Lecture by

a) Dr. Akhilesh K. Gupta, Advisor, Department of Science and Technology, New Delhi
b) Dr. K. K. Singh, Head Agromet Advisory Services, India Meteorological Department, New Delhi

45. List the teaching methods adopted by the faculty for different programmes.

White Board, Power Point Presentation, Tutorial, Laboratory Quiz and assignments.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

a) We take feedback from students through questionnaire (twice)
b) We ask teachers about the course coverage (twice) to have track on the syllabus covered

47. Highlight the participation of students and faculty in extension activities.

There is a Mentor who is also a faculty member and in general he takes one or more courses for a group of thirty students in every class. His role is to interact with students on one-to-one basis, and help them to resolve any issue which may come during the course of their study.

48. Give details of "beyond syllabus scholarly activities" of the department.

The school invites eminent guests from various fields for their expert talk.

49. State whether the programme/department is accredited/graded by other agencies? If yes, give details.

NIL

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Through guest lecture, workshop and seminar activities.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strength:

Research projects
Good Laboratory
Inspiration of researchers for attending conferences and workshops
Quality field observation in Himalayas

52. Future plans of the department

- Enhancing the research facility
- Applying for the Research Projects
- Providing financial assistance to large number of scholars
- Starting of new master program as M.Sc. in Environmental science and water resources management