**SHIVAJI COLLEGE**

**(UNIVERSITY OF DELHI)**

**NEW DELHI-110027**

**Annual Performance Appraisal Report**

**(Associate Professor stage III and above)**

**As per CAS 2018**

(To be submitted at the end of every academic year)

**Academic Year 2023-24**

(Information provided should pertain to the academic referred above)

**PART-A: GENERAL INFORMATION AND ACADEMIC BACKGROUND**

1. Name (in Block Letters): PROF. SUNITA GUPTA
2. Father’s Name/Mother’s Name: SH. SATPAL GARG
3. Date and Place of Birth: 25-07-1969, Punjab, India
4. Sex: Female
5. Marital Status: Married
6. Nationality: Indian
7. Department: Zoology
8. Current Designation and Academic Level: Professor, level 14
9. Date of Last Appointment/Promotion: 26.06.2006/26.06.2014/1.1.2023
10. Category (SC/ST/OBC/PWD/General): General
11. Address for Correspondence (with Pin code):

Address: 168, 2nd Floor, Vaishali, Pitampura, New Delhi -110034

Telephone No.: -- 011-42951040

Mobile No.: 9136303435, 9136371113

1. Permanent Address (with Pin code), in case different from Sl. No. 11:

Address: 168, 2nd Floor, Vaishali, Pitampura, New Delhi -110034

Telephone No.: 011-42951040

Mobile No.: 9136303435, 9136371113

1. Academic Qualifications:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Examination | Name of Exam | University | Year of Passing | Percentage of Marks obtained | Division/ Class/ Grade | Main Subjects |
| Graduation | B.SC | University of Ajmer, Rajasthan | 1988 | 59% | II | Chemistry,  Zoology  Botany |
| Post-  Graduation | M.SC (Zoology) | University of Ajmer, Rajasthan | 1990 | 59% | II | Zoology |
| Other  Examination  if any |  |  |  |  |  |  |

1. Research Degree(s)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Degrees | | Name of the University | Title of  dissertation/ thesis | Date of  submission | Date of  Award |
| M.Phil. |  | |  |  |  |
| Ph.D. | Rajasthan University, Jaipur | | Toxicological studies of Lymnaea acuminata and Pila globosa following exposure to lead. | 13-12-1993 | 29-06-1995 |
| D.Sc/D.Lit. |  | |  |  |  |

1. Course taught at various levels during the academic year (Name of the course giving details):

(a) Undergraduate : Ecology, Physiology, Non Chordata, Chordata

(b) Postgraduate : Not applicable.

16. Field of Specialization under the Subject/Discipline: **Environmental Toxicology**

17. Details of Course / Programmes / Workshop/MOOCs attended or completed.

17.1 Details of Refresher/orientation course/research methodology/ workshop/syllabus up-gradation/teaching-learning-evaluation/technology programmes / Faculty Development Programme

17.2 MOOCs complete with e-certification

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of MOOC | Subject | Certification providing agency | Date of certification | Level  (UG/PG/Other) | E-certification no. |
|  |  |  |  |  |  |  |

17.3 Contribution towards development of e-content/MOOCs in 4-quadrants

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of E-contents/MOOCs in 4-quadrants | Quadrants developed | No. of Modules | Course | Sponsoring Agency | Year | Level  (UG/PG/Other) |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

17.4 Contribution towards conduct of MOOCs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No. | Details of MOOC | Subject | Sponsoring Agency | Level  (UG/PG/Other) | E-certification no. |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**PART-B: ACADEMIC PERFORMANCE ASSESSMENT**

(Please refer to “Detailed Guidelines” for completing Part-B)

**SECTION B.1:**

**TEACHING,LEARNING,EVALUATION RELATED ACTIVITIES**

1. Teaching Activity (Details of Lectures, Tutorials, Practicals and other

teaching related

activities)

Grading Criteria:

1. 80% & above - Good

2. Below 80% but 70% & above – Satisfactory

3. Less than 70% - Not Satisfactory

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S. No. | Year/Semester | Course/ Paper | Level (PG/ UG) | Teaching Mode | Lectures/Tutorials/Practicals/Other related activities | | % of assigned Classes Taught |  |
|  |  |  |  |  | Classes Assigned | Classes Taught |  |  |
| **1** | Odd semester ,2023 | Zoology (H) Semester I- Ecology (Theory & Practical), Non-Chordata (practical), Semester III- Physiology (Practical) | UG | As per University notification | As per College Time table | | As per College Time table | Above 90% |
| **2** | Even semester ,2023 | Zoology (H) Semester II- Physiology (Theory & Practical) Non-Chordata (practical), Semester IV - Chordata (Practical), Semester VI- Wildlife Conservation and Management (Theory) | UG | As per University notification | As per College Time table | | As per College Time table | Above 90% |
|  | GRADING | |  |  | GOOD | |  |  |

**SECTION B.2:**

**ADMINISTRATIVE SUPPORT, PARTICIPATION IN STUDENT’SCO-CURRICULAR AND EXTRA-CURRICULAR ACTIVITIES, PERSONAL DEVELOPMENT RELATED TO TEACHING AND RESEARCH ACTIVITIES.**

2. Student related activities/Research Activities

Grading Criteria:

Good – Involved in at least 3 activities

Satisfactory – 1-2 activities

Not-satisfactory – Not involved/undertaken any of the activities

(a) Administrative responsibilities such as Head/Dean/Director/coordinator, warden etc.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S. No | Nature of Activity | Designation | Institution/Department | Period | |  |
| From | To |  |
| 1. 1 | Head, Department of Zoology, Shivaji College | Professor | Department of Zoology, Shivaji College | 2.5.2023 | 30.04.2024 | Head, Department of Zoology, Shivaji College |
|  | Member Selection Committee for selection of Assistant Professor in the Department of Zoology, Shivaji College | Professor | Department of Zoology, Shivaji College | 15.12.2023 | 18.12.2023 |  |
| 1. - | Member Admission Committee | Professor | Department of Zoology, Shivaji College | 2023 | 2024 | Member Admission Committee |
| 1. 10 | Member Sports Committee | Professor | Department of Zoology, Shivaji College | 2023 | 2024 | Member Sports Committee |

(b) Examination and evaluation duties assigned by college/university or attending the examination paper evaluation.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No | Nature of Activity | Designation | Institution/Department | Period | |
| From | To |
|  | Superintendent for Practical Examination of Zoology(H) and Life science IV & VI Semester | Professor | Department of Zoology, Shivaji College | May, 2023 | May, 2023 |
|  | Superintendent for Practical Examination of Zoology(H) and Life science , II Semester | Professor | Department of Zoology, Shivaji College | July, 2023 | July, 2023 |
|  | Superintendent for Practical Examination for odd semesters of Zoology(H), Life Sciences, GE, SEC, DSE conducted in the Department of Zoology, Shivaji College | Professor | Department of Zoology, Shivaji College | 04.12.2023 | 14.12.2023 |
|  | Internal Examiner for Practical Examination and paper checking of Zoology(H) II Semester | Professor | Department of Zoology, Shivaji College | 10.05.2024 | 10.05.2024 |
|  | Internal Examiner for Practical Examination, paper checking of Zoology (H) II Semester | Professor | Department of Zoology, Shivaji College | 11.05.2024 | 11.05.2024 |

(c) Student related co-curricular, extension and field based activities such as student clubs, career counseling, study visits, student seminars, and other events, cultural, sports, NCC, NSS and community services.

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| --- | --- | --- | --- | --- | --- |
| S. No | Nature of Activity | Level  (PG/ UG) | Institution/Department | Period | |
| From | To |
|  | Resource Person in the Summer Training Organized by Department of Zoology under DBT-Star College scheme for UG Students. | UG | Department of Zoology, Shivaji College | 27.06.2023 | 05.07.2023 |
|  | Orientation Day | UG | Department of Zoology, Shivaji College | 2023 |  |

(d) Organising Seminars/Conferences/workshops, other college/university activities.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Details | Place | Period | | Sponsoring/ Organising Agency |
| From | To |
| **1.** | Convener for organizing a seminar in the Department of Zoology | Shivaji College, Delhi University | 29.09.2023 | 29.09.2023 | Shivaji College, Delhi University |
| **2.** | Convener for organizing a talk on completion of 350 years of coronation of Chhatrapati Shivaji Maharaj by ‘OYSTER’, the zoological society, Shivaji College | Shivaji College, Delhi University | 03.02.2024 | 03.02.2024 | Shivaji College, Delhi University |
| **3.** | Attending the 8th International Conference organized by INSCR and ANDC College, Delhi University | Delhi University | 03.04.2024 | 05.04.2024 | Delhi University |

(e) Evidence of actively involved in guiding Ph. D. students.

|  |  |  |  |
| --- | --- | --- | --- |
| Level of Guidance | Registered | Thesis/Dissertation  Submitted | Degree Awarded |
| Ph.D |  |  |  |

(f) Conducting minor or major projects sponsored by national or international agencies.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No | Title | Period | | Major/Minor | Sponsoring/Funding Agency |
| From | To |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

(g) At least one single or joint publication in peer-reviewed or UGC list of Journals.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S. No | Title of the Paper | Journal Name | Year | Vol No. | Page No. | ISSN No. | Impact Factor | Whether SCOPUS Indexed | Authorship | Reference number of UGC-CARE list |
| 1. **1.** | Bioaccumulation of lead in experimentally exposed fresher water mollusc, pila globose. | Indian J. Environ. & Toxicology |  | 4(2) | 19-24 | 0971-2127 | -- |  | One of two Author | Peer-reviewed |
|  | Uptake of lead acetate by freshwater mollusc, Lymnaea acuminata. | Indian J. Environ. & Toxicol. |  | 5 (2) | 63-64 | 0971-2127 | - |  | Sole Author | Peer-reviewed |
|  | Histopathological studies of various organs of freshwater gastropod, Pila globosa after treatment with lead acetate. | Indian J. Environ. & Toxicol. |  | 6 (2) | 67-71 | 0971-2127 | - |  | First Author | Peer-reviewed |
|  | Influence of calcium on the uptake and deposition of lead in Pila globosa | Indian J. Environ. & Toxicol. |  | 6 (1) | 39-42 | 0971-2127 | - |  | First Author | Peer-reviewed |
|  | Acute toxicity of lead to two species of freshwater gastropod molluscs, Lymnaea acuminata and Pila globosa | Indian J. Environ. & Toxicol |  | 6 (1) | 48-49 | 0971-2127 | - |  | First Author | Peer-reviewed |
|  | Influence of lead in various organs of Lymnaea acuminata after supplementation with calcium chloride | Geobios |  | 23. | 251-258 | 0251-1223 | - |  | First Author | Peer reviewed |
|  | 3-D Bioprinting, a science of New Possibilities and New Cures. | International Journal of Biotechnology and Biomedical Sciences | 2016 | Volume 2, issue 3 | 238-242 | 2454-4582 | 4.266 |  | First First Author | Peer reviewed |
|  | Microstructure observations of Lemna aequinoctialis ecotype. | Journal of Scientific  Research., BHU | 2021 | Volume 65, issue 5, 2021 | 164-171 | 0447-9483 | - |  | One of two Author | UGC Care List |
|  | Foldscope Embedded Pedagogy in Steam Education: A case Study of SDG4 Promotion in India | Sustainability, MDPI | 2022 | 14,13427 | 1-16 | 20711050 | 3.889 | Scopus | Corresponding Author | Scopus |
|  | Influence of vehicular frequency on air quality of Delhi, India | Ecological Chemistry And Engineering S(SCIENDO) | 2022 | DOI: 10.2478/ece-2022-0034 | Page No 477-48510 |  | 1.707 | Scopus | Joint Author | Scopus |
|  | Undergraduate internship on Yamuna River exploration: Raising awareness about SDG6. Sustainability, | Sustainability, MDPI | 2023 | 15(13)10350 |  |  | 3.889 | Scopus | First Author | Scopus |

Note:

Impact factor to be determined as per Thomson Reuters list

The Authorship is to be filled as follows:

* One of Two Authors
* For more than Two Authors
* First/Principle/Corresponding Author
* Joint author

OVERALL GRADING FOR B.2

|  |  |  |
| --- | --- | --- |
| No. of Activities Covered\* | 4 |  |
| Overall grading | Good |  |

\*Note:

Number of activities can be within or across the broad categories of activities.

(Please attach supporting documents as per requirement)

SUMMARY OF GRADING FOR THE ACADEMIC YEAR

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Activity | Section | Gradation  (To be given/verified by HoD) |
|  |  |
| 1. | Teaching Activity | B.1 | **Good** |
| 2. | Student Related/Research Activity | B.2 | **Good** |

**Overall grading for the Academic Year for the Section B.1and B.2\* ……………………**

\*Note: Overall Grading for the Academic Year is to be defined as follows:

Good – Good in teaching and satisfactory or good in activity in Section B.2 or

Satisfactory – Satisfactory in teaching and good or satisfactory in activity in Section B.2 or

Not-satisfactory – If neither good nor satisfactory in overall grading

**SECTION B.3:**

**RESEARCH AND ACADEMIC CONTRIBUTIONS**

1.Published Research Papers in Refereed/Peer-Reviewed or UGC listed Journals

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Title of the Paper | Journal Name | Year | Vol. No. | Page No. | ISSN No. | Impact Factor | Scopus Indexed | Authorship | Reference number of UGC-CARE List |
|  | Bioaccumulation of lead in experimentally exposed fresher water mollusc, pila globose. | Indian J. Environ. & Toxiol. |  | 4(2) | 19-24 | 0971-2127 | -- |  | One of two Author | Peer-reviewed |
|  | Uptake of lead acetate by freshwater mollusc, Lymnaea acuminata. | Indian J. Environ. & Toxicol. |  | 5 (2) | 63-64 | 0971-2127 | - |  | Sole Author | Peer-reviewed |
|  | Histopathological studies of various organs of freshwater gastropod, Pila globosa after treatment with lead acetate. | Indian J. Environ. & Toxicol. |  | 6 (2) | 67-71 | 0971-2127 | - |  | One of two Author | Peer-reviewed |
|  | Influence of calcium on the uptake and deposition of lead in Pila globosa | Indian J. Environ. & Toxicol. |  | 6 (1) | 39-42 | 0971-2127 | - |  | One of two Author | Peer-reviewed |
|  | Acute toxicity of lead to two species of freshwater gastropod molluscs, Lymnaea acuminata and Pila globosa | Indian J. Environ. & Toxicol |  | 6 (1) | 48-49 | 0971-2127 | - |  | Single Author | Peer-reviewed |
|  | Influence of lead in various organs of Lymnaea acuminata after supplementation with calcium chloride | Geobios |  | 23. | 251-258 | 0251-1223 | - |  | One of two Author | Peer reviewed |
|  | 3-D Bioprinting, a science of New Possibilities and New Cures. | International Journal of Biotechnology and Biomedical Sciences | 2016 | Volume 2, issue 3 | 238-242 | 2454-4582 | 4.266 |  | One of two Author | Peer reviewed |
|  | Microstructure observations of Lemna aequinoctialis ecotype. | Journal of Scientific  Research., BHU | 2021 | Volume 65, issue 5, 2021 | 164-171 | 0447-9483 | - |  | One of two Author | UGC Care List |
|  | Foldscope Embedded Pedagogy in Steam Education: A case Study of SDG4 Promotion in India | Sustainability, MDPI | 2022 | 14,13427 | 1-16 | 20711050 | 3.889 | Scopus | Corresponding Author | Scopus |
|  | Influence of vehicular frequency on air quality of Delhi, India | Ecological Chemistry And Engineering S(SCIENDO) | 2022 | DOI: 10.2478/ece-2022-0034 | Page No 477-48510 |  | 1.707 | Scopus | Joint Author | Scopus |
|  | Undergraduate internship on Yamuna River exploration: Raising awareness about SDG6. Sustainability, | Sustainability, MDPI | 2023 | 15(13)10350 |  |  | 3.889 | Scopus | First Author | Scopus |

Note:

Impact factor to be determined as per Thomson Reuters list The Authorship is to be filled as follows:

* One of Two Authors
* For more than two Authors:
* First/Principal/Corresponding Author
* Joint Author

2. Publications (other than Research papers)

a.(i) Books authored as one of two authors! First/Principal/Corresponding Author/ Joint Author

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Title of the Book | Editorship\* | Level of Publisher (National/International | Publisher (with city/country & year of Publication | ISBN | Whether Refereed |
| 1. | Perspectives in Practical Ecology | One of the two authors | National | Prestige Publishers,Delhi  2021 | 9788194942849 |  |
|  |  |  |  |  |  |  |
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\*The Authorship is to be filled as follows:

* One of Two Authors
* For more than two Authors:
* First/Principal/Corresponding Author
* Joint Author

a.(ii) Chapter in Edited Books

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Title of Edited Book | Title of Chapter | Authorship\* | Publisher (with city/country & year of Publication | ISBN | Whether Refereed |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

\*The Authorship is to be filled as follows:

* One of Two Authors
* For more than two Authors:
  + First/Principal/Corresponding Author
  + Joint Author

a.(iii) Books Edited as one of the Two Editor/First/Principal/Corresponding Editor/Joint Editor

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Title of Edited Book | Editorship\* | Level of Publisher(National /international) | Publisher (with city/country & year of Publication | ISBN | Whether Refereed |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

\*The Editorship is to be filled as follows:

* One of Two Editors
* For more than two Editors:
  + First/Principal/Corresponding Editors
  + Joint Editors

b. Translation works in Indian and Foreign Languages by qualified faculties.

b.(i) Chapter or Research Paper

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.No | Title of the Paper/Chapter | Journal/Book Name | Year | Vol. No. | Page No. | ISSN/ISBN No. | Impact Factor | Authorship\* | Reference number of UGC – CARE List |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

\*The Authorship is to be filled as follows:

* One of Two Authors
* For more than two Authors:
  + First/Principal/Corresponding Author
  + Joint Author

b.(ii) Books Translated

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Title of the Book | Authorship\* | Publisher (with city/country) & Year of Publication | ISBN | Whether Refereed |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

\*The Authorship is to be filled as follows:

* One of Two Authors
* For more than two Authors:
  + First/Principal/Corresponding Author
  + Joint Author

3. Creation of ICT mediated Teaching Learning pedagogy and content and development of new and innovative courses and curricula

(a) Development of Innovative Pedagogy

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Name of the Module | Subject | Stream | Organization for which it was developed | Year | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |

(b) Design of new Curricula and Courses

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Name of the Curricula/Course | Subject | Organization for which it was developed | Year | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

(c) Development of MOOCs

c.1 Development of complete MOOCs in 4 quadrant for a course with credits

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of MOOC (with no. of quadrant) | Credits | Course | Subject | Organization for which it was developed | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

c.2 MOOCs (developed in 4 quadrant ) per module/Lecture

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of MOOC (with no. of quadrant) | Details of Module | Course | Subject | Organization for which it was developed | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

c.3 Content writer/subject matter expert for each module of MOOCs ( at least one quadrant)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of MOOC (with no. of quadrant) | Details of Module | Course | Subject | Organization for which it was developed | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

c.4 Course Coordinator for MOOCs ( 4 credit course )

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of MOOC (with no. of quadrant) | Credits | Course | Subject | Organization for which it was developed | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

(d) Development of E-Content

d.1. Development of e-Content in 4 quadrants for a complete course/e-book

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of E-Content (with no. of quadrant) | Course/E-book | Subject | Organization for which it was developed | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

d.2 E-content (developed in 4 quadrants) per module

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of E-Content (with no. of quadrant) | Course/E-book | Subject | Organization for which it was developed | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

d.3 Contribution to development of e-content module in complete course/paper/e-book (at least one quadrant)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of E-Content (with no. of quadrant) | Details of Module | Course | Subject | Organization for which it was developed | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

d.4 Editor of e-content for complete course/paper/e-book

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Details of E-Content (with no. of quadrant) | Course/Paper?E-book | Subject | Organization for which it was developed | Level (UG/PG/Other) | Weblink |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

3. (a) Research Guidance.

|  |  |  |  |
| --- | --- | --- | --- |
| Level of Guidance | Registered | Thesis/Dissertation Submitted | Degree Awarded |
| Ph.D. |  |  |  |
| MPhil./P.G. Dessertation |  |  |  |

(b) Research Projects Completed

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Title | Status of PI\* | Duration(in months) | Period (From-to) Dates to be given | Total Grant/Funding received (Rs.) | Name of Sponsoring/Funding Agency | Outcome of the Project |
|  | Amelioration of Air quality in urban ecosystem of Delhi”. Role of Avenue trees and use of birds as bio-monitors under Delhi University Innovation Project (2015-16 | PI (Completed ) | One year | 2015-2016 | 5 Lacs | Delhi University ( Innovation project; code SHC 307) | i)Selection of tree species which have high capacity for entrapment of particulate matter & enhanced ability to ameliorate air pollutants. Ficus spp. were found to be good in ameliorating air quality in urban eco system & therefore would be recommended for the avenue plantations along the road sides in Delhi. But it needs a further long time studies.  ii)First time we have reported that house sparrows are sensitive to air pollution and the house sparrow abundances can be used as indications of air quality in urban eco system of Delhi. |
| 2. | To record the seasonal variation of invertebrate biodiversity in Riparian zone of the Yamuna River in Delhi-NCR region by using foldscope as a research tool” (2018-19) | PI (Completed) | 1 Yr & 3 months | July 2018 to Oct.2019 | 8 Lacs | Department of Biotechnology, Ministry of Science and Technology, Govt. of India | Album of the invertebrate thriving river Yamuna in Delhi using foldscope. The videos recorded in this project will be adapted with the reading materials for students in the future. The research outcomes of this project have been organized into several manuscript which has been published in scopus journal. |

\*Kindly indicate whether you are Sole PI/PI/Co-PI in the project

(c) Research Projects ongoing

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| S.No. | Title | Status of PI\* | Duration(in months) | Period (From-to) Dates to be given | Total Grant/Funding received (Rs.) | Name of Sponsoring/Funding Agency | Outcome of the Project |
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\*Kindly indicate whether you are Sole PI/PI/Co-PI in the project

(d) Consultancy.

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| S.No. | Title | Duration (in months) | Period (From-to) Dates to be given | Total Grant/Funding received (Rs.) | Name of Sponsoring/Funding Agency | Whether routed through Parent University/College |
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5. (a) Patents

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| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Title\* | Area / Subject | Date of Award | Level (International /National) | Reference Number | Sponsoring Agency |
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\*Only patents awarded are to be mentioned.

(b) Policy Document (Submitted to an International body/organisation like UNO/UNESCO/World Bank/International Monetary Fund etc. or Central Government or State Government)

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| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Title\* | Area / Subject | Date of publication /Submission | Level (International /National/State)) | Reference Number | Sponsoring Agency |
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\*Only Policy documents published submitted to bodies/organizations detailed above shall be considered.

(c) Awards/Fellowship

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| S.No. | Name of Award/Honor\* | Area / Subject | Name of Awarding Body | Level (International /National) | Date |
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\*Entries for awards made in this section should be from post graduation onwards only. Junior/Senior research fellowship and non-net fellowship should not be included.

6. Invited lectures / Resource Person/ paper presentation in Seminars/Conferences/full paper in Conference Proceedings (Paper presented in Seminars/Conferences and also published as full paper in Conference Proceedings will be counted only once)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Title of Lecture/Paper | Invited Lecture/Resource Person/Paper presented | Nature of Programme\* | Details | Level\* | Date of presentation | Duration (in minutes) | Sponsoring Agency |
|  | Seasonal variation in the Biodiversity of Invertebrates of Yamuna River in Delhi’ in National Conference on Advances in Microscopy and foldscope | Paper Presented |  |  |  | 15-16 March, 2019 |  | Department of Biotechnology, Motilal Nehru National Institute of Technology, Allahabad, Prayagraj |
|  | One-day workshop on “Assembly and Use of Foldscope | Convenor & Resource Person |  |  |  | 18th October, 2019 |  | Deen Dayal Upadhyaya College, University of Delhi under the aegis of the Science Foundation. |
|  | Field workshop on “Water and soil sampling techniques to study the Yamuna river biodiversity | Convenor and Resource Person |  |  |  | March 31st 2019 |  | Department of Biotechnology [Government of India] |
|  | workshop on Foldscope Assembly and uses | Convenor and Resource Person |  |  |  | April 2nd 2019 |  | Department of Biotechnology [Government of India] |
|  | Research internship program to study the ecological parameters and invertebrate diversity of Yamuna River | Convenor and Resource Person |  |  |  | 15th April 2019 |  | Department of Biotechnology [Government of India] |
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\*Seminar/FDP/Conference

\*\*Level : International (Abroad)/International (within country)/National / State/University.

(Please attach supporting documents wherever required)

**PART-C OTHER RELEVANT INFORMATION**

(a) Membership/Fellowship of Learned bodies / Societies:

(b) Literary, cultural or other activities (e.g. attainment in sports etc.) in which the applicant is interested and distinctions obtained:

(c) Please give details of any other credential, significant contributions, awards received, responsibilities, etc. not mentioned earlier.

1. Governing Body member of Shivaji College, Delhi University for one year w.e.f 28.09.2015
2. One of the significant contributions was the following Research project which was appreciated by **Prof.K.Vijay Raghavan, Principal Scientific Advisor** to the Government of India, in a special visit on 1st May 2019 to encourage and appreciate the work done by the team of students guided by me in this research project. This is the first of its kind visit by **Prof.K.Vijay Raghavan in any College of Delhi University. Details of the project are as follows:**

**Title:**To record the seasonal variation of invertebrate biodiversity in the Riparian zone of the Yamuna River in Delhi-NCR region by using foldscope as a research tool.

**Funding Agency:** Department of Biotechnology, Ministry of Science and Technology, Government of India

**Principal Investigator:**Dr.Sunita Gupta, Assistant Professor, Dept. of Zoology, Shivaji College, University of Delhi, India

**Summary:**

The objective of this project was to record the seasonal variation in the invertebrate biodiversity in the riparian zone by using foldscope as a research tool. For this, three Yamuna bank stretches were selected, namely, Shri Yamuna ArtiSthal, ChhatGhat andDND flyway. Each month, water and soil were collected from these three selected banks/ Riparian zones of Yamuna River. The soil and water thus collected were monitored for **physical parameters** like pH, dissolved oxygen, sulphate, nitrate, chloride levels by sensitive kits. A correlation was made between these physical parameters and the invertebrate Biodiversity. The **turbidity of water** at the banks was also checked by secchi disk and TDS/ Total dissolved solids were determined by TDS meter. **Arthropods, Nematodes** from the soil and **Planktons** in the river were observed by collecting the upper layer of Yamuna water and observing it on slide by foldscope. After collection the organisms were recognized and classified as per their characteristics. Mobile camera was attached with the foldscope to record the pictures. A picture album for species has been created for online studies of the organisms. Species diversity in each month for all 3 Banks was calculated by measuring Biodiversity indices [**Simpson’s Index and Shannon Wiener Index**].

**Project Highlights:**

* Hosted the Principal Scientific Advisor to Government of India, **Prof. K. Vijay Raghavan** at Shivaji College in a special visit on 1st May 2019 to encourage and appreciate the work done by the team of students guided by Dr. Sunita Gupta in this research project.
* Hosted **Dr. Shailja Vaidya Gupta**, from the office of the Principal Scientific Advisor to Govt. of India on 15th April 2019 and 1st May 2019.
* Hosted **Dr. Jim Cybulski**, a Stanford Alumni, Co-inventor of foldscope and CEO, Foldscope Instruments, Inc. on 15th April 2019.
* A series of **workshops** were organized for the students of nearby Govt. Schools at Shivaji College to teach them the use of foldscope and learn the biodiversity in water bodies around them.
* Inter college **Field workshop for** the students of University of Delhi, on “Water and soil sampling techniques to study the Yamuna river biodiversity” on March 31st 2019.
* Department of Biotechnology [Government of India] sponsored, **Hands-on workshop** on Foldscope Assembly and uses” on April 2nd 2019 at Department of Zoology, Shivaji College, India.
* Department of Biotechnology [Government of India] sponsored, **Research internship program** to study the ecological parameters and invertebrate diversity of Yamuna River in Delhi till 15th April 2019, India. It was a competitive and intercollege event in which 30 students from all over the University participated.

(d) Future Plans (In approximately 150 words):

I wish to create an online/ e-resource of invertebrates of Delhi. This educational resource will include the ecological details of the organisms as well. The website will be developed after a series of internships with first and second semester students at the college. I have been taking practical sessions of both Invertebrate Zoology and Ecology, therefore I will train the students of the first and the second semester to explore soil and water of Delhi to collect the specimens, record their Ecological parameters, habits and habitat. This way the interest in taxonomy and ecology will be rejuvenated among students. I will endeavor to bag multiple research grants from various funding agencies to carry out this project.

LIST OF ENCLOSURES: (Please attach self-certified copies of certificates, sanction orders, papers, etc. where

1. International Conference Certificate
2. Practical Examination –
3. TIC, Dept. of Zoology
4. Time Table
5. D.B.T. Star College Certifcate
6. Letter of Member Selection Commiittee

**PART-D DECLARATION**

I have read the applicable guidelines, which are binding. I do hereby solemnly declare that the information given, the statements and documents uploaded with this application form are correct and true to the best of my knowledge and belief. If any information given by me in this application is found to be false or misleading, my candidature is liable to be cancelled and I may be subjected to legal/disciplinary proceedings.

Date : 26.07.2024

Place : Delhi

(Professor)

Signature & Designation of the Applicant

Dr. Sunita Gupta has been working as Professor since 01.01.2023

The particulars given in this application have been checked and verified from office records and documents enclosed are found to be correct.

The gradations have been verified on the basis of the performance of the applicant and the credentials/documents provided and enclosed herewith by the applicant.

Head of the Department/Centre