# Evaluative reports Faculty of Science <br> Profile of the Departments 

## A. Department of Botany

1. Faculty profile, adequacy and competency of faculty
2. Name and address of the department: Department of Botany

Date of establishment of the department :1949
The built up area of the department is: Approximately 150 sq. m.
2. List the different programmes (Level of Study $=\mathrm{UG} / \mathrm{PG} / \mathrm{PG} / \mathrm{Ph} . \mathrm{D} . / \mathrm{Post}$ Doctoral.) offered by the department together with the details required below:

| Programme | Level of | Cut-off Marks | Student |
| :--- | :---: | :---: | :---: |
| Study | at entry, in \% |  |  | | Strength |
| :---: |

3. Interdisciplinary courses and departments involved: Not applicable
4. Annual/semester/choice based credit system: Semester system
5. Participation of the department in the courses offered by other departments:

Not applicable.
6. Number of Teaching posts sanctioned and filled
(details of the posts not available)

| Nos. of sanctioned posts: 18 | Male | Female | Total |
| :--- | :---: | :---: | :---: |
| Total no. of Teachers. | $\mathbf{0 7}$ | $\mathbf{0 7}$ | $\mathbf{1 4}$ |
| Teachers with Ph.D. as the highest qualification. | 04 | 03 | 07 |
| Teachers with PG or equi valent as | 03 | 04 | 07 |
| the highest qualification (Specify) |  |  |  |

7. Faculty profile with name, qualif ication, designation, specialization.

| Name of the Teacher | Designation | Highest <br> Qualification | Specialisation | Exp. years | Age | Sex |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.Mr. D.K. Tripathy | Associate <br> Professor | M.Sc. | Cytogenetics | 33 | 61 | M |
| 2.Dr. A. K. Bariar | Associate <br> Professor | Ph.D. | Cytogenetics | 31 | 62 | M |
| 3.Mr. R. K. Jha | Associate <br> Professor | M .Sc. | Cytogenetic | 29 | 57 | M |
| 4.Dr. Sageer <br> Ahmad | Assistan $t$ <br> Professor | Ph.D. | Plant Physiology | 27 | 54 | M |
| 5.Dr. M. Kerketta | Assistant <br> Professor | Ph.D. | Plant Taxonomy | 26 | 56 | F |
| 6.Dr. I.P.Gupta | Assistant <br> Professor | M .Sc. | Algology | 17 | 50 | M |
| 7.Dr. A.Kumar | Assistant <br> Professor | Ph.D. | Plant Pathology | 26 | 51 | M |
| 8.Dr. S.Lal | Assistan $t$ <br> Professor | Ph.D. | Plant Mol. Biol. | 03 | 35 | F |
| 9.Dr. V.Kumari | Assistant <br> Professor | Ph.D. | Algology | 03 | 43 | F |


| 10.Mrs. A.Sinha | Assistant <br> Professor | M.Sc. | Plant Physiol ogy | 03 | 37 | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11.Mrs. R.Mish ra | Assistant <br> Professor | M.Sc. | Plant Biotech. | 10 | 45 | F |
| 12.Mrs. G.Singh | Assistant <br> Professor | M.Sc. | Taxonomy | 03 | 33 | F |
| 13.Mrs. S.Prabha | Assistant <br> Professor | M.Sc. | Taxonomy | 03 | 32 | F |
| 14.Dr. A.Nag | Assistant <br> Professor | Ph.D. |  |  |  | M |
| 15. S.C. Oraon | Assistant <br> Professor | M.Sc. |  |  |  | M |

8. Percentage of classes taken by temporary faculty: Nil
9. Student/ teacher ratio: $\mathbf{4 . 0 0}$
10. Number of administrative staff: 03; Number of technical staff: 02
11. Number of faculty with ongoing projects:
Name
Designation
Funding agency
Grant received
Dr. A.K. Nag Asst. Prof. Minor project (UGC) 1.6 lakhs
12. Departmental projects funded by DST-FIST, DBT: NIL
13. Research facility/ centre with
State recognition $\times$
National recognition $x$
International recognition $x$
14. Publications:

| Department | S. No | Name | Qual. | n <br> Botany | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2 | D. TRIPATHI | M.Sc. | 0 | 07 |
|  | 3 | RK JHA | M.Sc. | 3 | 05 |
|  | 4 | S AHMED | Ph.D | 0 | 11 |
|  | 5 | M KERKETTA | Ph.D | 0 | 03 |
|  | 6 | A KUMAR | Ph.D | 0 | 10 |
|  | 7 | IP GUPTA | M.Sc. | 0 | 03 |
|  | 8 | S LAL | Ph.D | 0 | 10 |
|  | 9 | R MISHRA | M.Sc. | 0 | 01 |
|  | 10 | V KUMARI | M.Sc. | 0 | 04 |
|  | 11 | G SINGH | M.Sc. | 1 | 0 |
|  | 12 | AK NAG | Ph.D | 0 | 3 |
|  | 13 | S PRABHA | M.Sc. | 0 | 2 |
|  | 14 | A SINHA | M.Sc. | 0 | 0 |

15. Details of patents and income generated: NIL
16. Areas of consultancy and income generated: Not applicable.
17. Faculty recharging strategies: through refresher/orientation and workshop arranged by the academic staff college.
18. Student Projects: Percentage of students who have done in-house projects: 95 percent.

Percentage of students doing projects in collaboration with industries/institutions: 5 percent.
19. Awards/recognitions received at the national and international level by Faculty $\checkmark$ One (Dr. A.K.Bariar) -national

Doctoral/Post Doctoral fellows $\times$
Students $\times$
20. Seminars/ conferences/w orkshop organized and the source of funding: NLL
21. Student profile course-wise

|  | Year 2011 |  |  | Women |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | UG | PG | Total | UG | PG | Total |
| Admitted to the programme (entry year) | 40 | 20 | 60 | 24 | 14 | 38 |
| Drop-outs | 05 | 04 | 09 | Nil | Nil | Nil |
| Appeared for the final year examination | 35 | 16 | 51 | 22 | 13 | 04 |
| Passed in the final exam | 34 | 14 | 48 | 20 | 11 | 31 |
| Passed in I class | 12 | 09 | 21 | 12 | 08 | 20 |

22.Diversty of students:

| Name of the <br> Curse <br> (refer <br> question no. <br> 2) | \% of <br> sudents <br> from the <br> College | \% of students <br> from the <br> State | \% of students <br> from other <br> States | \% of <br> students <br> from <br> other <br> countries |
| :---: | :---: | :---: | :---: | :---: |
| Both UG\& PG | 05 | $\mathbf{8 0}$ | $\mathbf{1 5}$ | NIL |

23.How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

02 in the last five years
24. Student progression

| Y ear | UG to PG (\%) | PG to Research(\%) |
| :--- | :---: | :---: |
| 2007 | 36 | 14 |
| 2008 | 38 | 11 |
| 2009 | 30 | 08 |
| 2010 | 34 | 07 |
| 2011 | 35 | 08 |

25.Diversity of staff

| Percentage of faculty who are graduates |  |
| :--- | :--- |
| of the same parent university | 12 |
| from other universities within the State | 00 |
| from other universities from other States | 02 |

26.Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

NIL
27.Present details about infrastructural facilities
a) Library: Yes the Departmental has a Library with 1400 books.
b) Internet facilities for staff and students
c) Total number of class rooms: 3
d) Class rooms with ICT facility: it is being provided
e) Students' laboratories: $\mathbf{2}$
f) Research laboratories: 1
28. Number of students of the department getting financial assistance from College.
Students are generally provided financial assistance from the state government.
29.Was any need assessment exercise undertaken before the development of
new program(s)? If so, give the methodology.
Not applicable at present but there are preparations for starting biotechnology.
30.Does the department obtain feedback from
a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
c. alumni and employers on the programmes and what is the response of the department to the same?

This is done on a college basis and reviewed for appropriate measures.
31.List the distinguished alumni of the department (maximum 10)
32.Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
Lectures of distinguished speakers are organised regularly. The students are also encouraged to take active part in the departmental seminars and speak to the audience. This helps in improving their communication skills considerably.
33.List the teaching methods adopted by the faculty for different programmes.

Generally the conventional method is used but at times presentation involving multime dia is used when necessary.
34.How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
Through mid-sem and end sem evaluation
35.Highlight the participation of students and faculty in extension activities. Extension activities of the department include tree planting and de velopment of a botanical garden.
36.Give details of "beyond syllabus scholarly activities" of the department. NIL
37.State whether the programme/ department is accredited/ graded by other agencies. Give details.
No
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
Strengths

1. Large infrastructure
2. Well qualified committed faculty
3. Research-oriented activity
4. Dedicated non-teaching staff
5. Good laboratories
6. Excellent success rate
7. Cordial relationship between staff and students
8. Collective leadership encouraged by the present principal
9. Extra-curricular and sports activities

Weaknesses

1. No national or international linkage
2. Some teaching and non-teaching posts lying vacant
3. No consultancy services
4. Lack of autonomy in financial matters due to the control of the university and government
5. Space in the college given to P. G. departments of Science Faculty Opportunities
6. Opening of new courses
7. Oppurtunities for the tribal population.

Challenges

1. To start biotechnology as a new and innovative course.
2. Future plans of the department.

To open new courses.

## Department of Chemistry

## 1. Faculty profile, adequacy and competency of faculty

1. Name and address of the department: Department of Chemistry

Date of establishment of the department :1949
The built up area of the department is: Approximately 300 sq. m.
2. List the different programmes (Level of Study = UG/PG/PG/Ph.D./Post Doctoral) offered by the department together with the details required below:

| Programme | Le vel of <br> Study | Cut-off Marks <br> at entry, in \% | Student <br> Strength |
| :--- | :---: | :---: | :---: |
| B.Sc. Part - I Hons | Bachelor | $50 \%$ | 50 |
| B.Sc. Part - II Hons | Do | $50 \%$ | 50 |
| B.Sc. Part - III Hons | Do | $50 \%$ | 50 |
| B.Sc. Part - I Gen \& Sub. | Do | $50 \%$ | 60 |
| B.Sc. Part - II Gen \& Sub. | Do | $50 \%$ | 60 |
| B.Sc. Part - III Gen | Do | $50 \%$ | 20 |
| M.Sc. Part-I | Master | $55 \%$ | 30 |
| M.Sc. Part-II | Master | $55 \%$ | 30 |

3. Interdisciplinary courses and departments involved: Not applicable
4. Annual/semester/choice based credit system: Semester system
5. Participation of the department in the courses offered by other departments:

Not applicable.
6. Number of Teaching posts sanctioned and filled

| Nos. of s anctioned posts: 21 | Male | Female | Total |
| :--- | :---: | :---: | :---: |
| Total no. of Teachers. | $\mathbf{0 9}$ | $\mathbf{0 1}$ | $\mathbf{1 0}$ |
| Teachers with Ph.D. as the highest qualification. | 09 | 01 | 10 |
| Teachers with PGor equivalent as <br> the highest qualification (Specify) | 00 | 00 | 00 |

7. Faculty profile with name, qualif ication, designation, specialization.

| Name of the Teacher | Designation | Highest Qualification | Specialisation | Exp. <br> years | Age | Sex |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.Dr. T.K. Bhattacharya | Associate <br> Professor | Ph.D | Inorganic chemistry | 38 | 61 | M |
| 2.Dr. M. Banerjee | Associate <br> Professor | Ph.D. | Organic | 38 | 61 | M |
| 3.Dr. P. P. Jha | Associate <br> Professor | Ph.D. | Inorganic | 29 | 60 | M |
| 4.Dr. K.N.Thakur | Associate <br> Professor | Ph.D. | Inorganic | 33 | 61 | M |
| 5.Dr. N.K. Roy | Assistant <br> Professor | Ph.D. | Physical | 18 | 51 | M |
| 6.Dr. P. Bharadwaj | Assistant <br> Professor | Ph.D. | Inorganic | 12 | 50 | F |
| 7.Dr. S.S.Singh | Assistant <br> Professor | Ph.D. | Physical | 15 | 48 | M |
| 8. Dr. K. Akhtar | Assistant <br> Professor | Ph.D. | Organic | 15 | 45 | M |
| 9. Dr. A.K. <br> Acharya | Assistant <br> Professor | Ph.D. | Physical | 12 | 40 | F |
| 10. Dr. Rajiv Ranjan | Assistant <br> Professor | Ph.D. | Organic | 04 | 34 | M |

8. Percentage of classes taken by temporary faculty: Nil
9. Student/ teacher ratio: 6.6
10. Number of administrative staff: 04; Number of technical staff: 02
11. Number of faculty with ongoing projects:

Name Designation Funding agency Grant received
a. Dr. R. Ranjan Asst. Prof. Minor project (UGC) 1.6 lakhs
b. Dr. A.K. Acharya Asst. Prof. Minor project (UGC)
1.6 lakhs
12. Departmental projects funded by DST-FIST, DBT: NIL
13. Research facility/ centre with

State recognition $\times$
National recognition $x$
International recognition $\times$
14. Publications:

| Department | S. No | Name | Qual. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Chemistry | 1 | TKBHATTACHARYA | Ph.D | 0 | 2 |
|  | 2 | M BANERJEE | Ph.D | 0 | 2 |
|  | 3 | PP JHA | Ph.D | 0 | 8 |
|  | 4 | KN THAKUR | Ph.D | 0 | 3 |
|  | 5 | K AKHTAR | Ph.D | 0 | 6 |
|  | 6 | NK ROY | Ph.D | 0 | 2 |
|  | 7 | AK ACHARYA | Ph.D | 1 | 2 |
|  | 8 | P BHARDWAJ | Ph.D | 0 | 1 |
|  | 9 | R RANJAN | Ph.D | 0 | 4 |
|  | 10 | SS SINGH | Ph.D | 0 | 0 |

15. Details of patents and income generated: NIL
16. Areas of consultancy and income generated: Not applicable.
17. Faculty recharging strategies: through refresher/orientation and workshop arranged by the academic staff college.
18. Student Projects: Percentage of students who have done in-house projects: 95 percent.
Percentage of students doing projects in collaboration with industries/institutions: 5 percent.
19.Awards/recognitions received at the national and international level by Faculty Not applicable
20.Seminars/ conferences/w orkshop organized and the source of funding: NIL
19. Student profile course-w ise

|  | Year 2011 |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | UG | PG | Total | UG | PG | Total |
| Admitted to the programme (entry year) | 50 | 20 | 70 | 27 | 15 | 37 |
| Drop-outs | 03 | 02 | 05 | Nil | Nil | Nil |
| Appeared for thefinal year examination | 47 | 18 | 61 | 27 | 15 | 42 |
| Passed in the final exam | 45 | 17 | 58 | 32 | 37 | 69 |
| Passed in I class | 14 | 11 | 23 | 05 | 08 | 13 |

22. Diversty of students:

| Name of the <br> Course <br> (refer <br> question no. <br> 2) | \% of <br> students <br> from the <br> College | \% of students <br> from the <br> State | \% of students <br> from other <br> States | \% of <br> students <br> from <br> other |
| :---: | :---: | :---: | :---: | :---: |
| Both UG\& PG | 05 | 80 | 15 | NIL |

23.How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

03 in the last five years
24.Student progression

| Yœar | UG to PG (\%) | PG to Research(\%) |
| :---: | :---: | :---: |
| 2007 | 36 | 14 |
| 2008 | 38 | 11 |
| 2009 | 30 | 08 |
| 2010 | 34 | 07 |
| 2011 | 35 | 08 |

25.Diversity of staff

| Percentage of faculty who are graduates |  |
| :--- | :--- |
| of the same parent university | 07 |
| from other universities within the State | $\mathbf{0 1}$ |
| from other universities from other States | $\mathbf{0 2}$ |

26.Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

NIL
27.Present details about infrastructural facilities
a) Library: Yes the Departmental has a Library with $\mathbf{2 3 0 0}$ books.
b) Internet facilities for staff and students $\checkmark$
c) Total number of class rooms: 4
d) Class rooms with ICT facility: it is being provided
e) Students' laboratories: $\mathbf{2}$
f) Research laboratories: $\mathbf{1}$
28.Number of students of the department getting financial assistance from College.

Students are generally provided financial assistance from the state government.
29.Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
Not applicable at present but there are preparations for starting environmental chemistry.
30.Does the department obtain feedback from
d. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
e. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
f. alumni and employers on the programmes and what is the response of the department to the same?

This is done on a college basis and reviewed for appropriate measures.

## 31.List the distinguished alumni of the department (maximum 10)

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

Lectures of distinguished speakers are organised regularly. The students are also encouraged to take active part in the departmental
seminars and speak to the audience. This helps in improving their communication skills considerably.
33.List the teaching methods adopted by the faculty for different programmes.

Generally the conventional method is used but at times presentation involving multime dia is used when necessary.
34.How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Through mid-sem and end sem evaluation
35.Highlight the participation of students and faculty in extension activities.

Extension activities of the department include tree planting and de velopment of a botanical garden.
36.Give details of "beyond syllabus scholarly activities" of the department.

NIL
37.State whether the programme/ department is accredited/ graded by other agencies. Give details.

No
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
Strengths
10.Large infrastructure
11. Well qualified committed faculty
12.Research-oriented activity
13.Dedicated non-teaching staff
14.Good laboratories
15.Excellent success rate
16. Cordial relationship between staff and students
17. Collective leadership encouraged by the present principal
18. Extra-curricular and sports activities

## Evaluative reports

Faculty of Science

Weaknesses
6. No national or international linkage
7. Some teaching and non-teaching posts lying vacant
8. No consultancy services
9. Lack of autonomy in financial matters due to the control of the university and government
10.Space in the college given to P. G. departments of Science Faculty Opportunities
3. Opening of new courses
4. Oppurtunities for the tribal population.

Challenges

1. To start Diploma course in Environmental Chemistry as a new and innovative course.
2. Future plans of the department.

To open new courses.

## Department of Mathematics

## 1. Faculty profile, adequacy and competency of faculty

1. Name and address of the department: Department of Mathematics

Date of establishment of the department :1946
2. List the different programmes (Level of Study = UG/PG/PG/Ph.D./ Post Doctoral.) offered by the department together with the details required below:

| Program me | Level of Study | Cut-off Marks <br> at entry, in \% | Student <br> Strength |
| :--- | :---: | :---: | :---: |
| B.A./B.Sc. Part - I Hons | Bachel or | $45 \%$ | 75 |
| B.A./B.Sc. Part - II Hons | Do |  | 74 |
| B.A./B.Sc. Part - III Hons | Do |  | 64 |
| B.Sc. Part - IGen \& Sub. | Do |  | 127 |
| B.Sc. Part- II Gen \& Sub. | Do |  | 52 |
| M.Sc. Part-I | Masters | $45 \%$ | 15 |
| M.Sc. Part-II | Do |  | 15 |

3. Interdisciplinary courses and departments involved: Not applicable
4. Annual/semester/choice based credit system: Semester system
5. Participation of the department in the courses offered by other departments:

Not applicable.
6. Number of Teaching posts sanctioned and filled

| Nos. of sanctioned posts: 04 | Male | Female | Total |
| :--- | :---: | :---: | :---: |
| Total no. of Teachers. | $\mathbf{0 3}$ | $\mathbf{0 0}$ | $\mathbf{0 3}$ |
| Teachers with Ph.D. as the highest qualification. | 03 | 00 | 03 |
| Teachers with PG or equi val ent as <br> the highest qualification (Specify) | 00 | 00 | 00 |

7. Faculty profile with name, qualif ication, designation, specialization.

| Name of the <br> Teacher | Designation | Highest <br> Qualification | Specialisation | Exp. <br> years | Age | Sex |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1.Dr. S.Prasad | Associate <br> Professor | Ph.D | Sp. functions | 30 | 61 | M |
| 2.Dr. A.K. Mahato | Assistant <br> Professor | Ph.D. | Statistics | $\mathbf{3 8}$ | 55 | M |
| 3.Dr. A.K. Jha | Assistant <br> Professor | Ph.D. | Modelling | 29 | 45 | M |

8. Percentage of classes taken by temporary faculty: Nil
9. Student/ teacher ratio: $\mathbf{5 7 . 6 6}$
10. Number of administrative staff: 01; Number of technical staff: 00
11. Number of faculty with ongoing projects: NIL

## Name Designation Funding agency Grant received

12. Departmental projects funded by DST-FIST, DBT: NIL
13. Research facility/ centre with

State recognition $\times$

National recognition $\times$
International recognition $\times$
14. Public ations:

| Department | S. <br> No | Name | Qual. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Mathematics | 1 | AK JHA | Ph.D | 0 | 9 |
|  | 2 | S PRASAD | Ph.D | 0 | 2 |
|  | 3 | AK MAHATO | Ph.D | 0 | 1 |
|  |  |  |  |  |  |

15. Details of patents and income generated: NIL
16. Areas of consultancy and income generated: Not applicable.
17. Faculty recharging strategies: through refresher/orientation and workshop arranged by the academic staff college.
18. Student Projects: Percentage of students who have done in-house projects: 95 percent.

Percentage of students doing projects in collaboration with industries/institutions: 5 percent.
19. Awards/recognitions received at the national and international level by Faculty Not applicable
20.Seminars/ conferences/workshop organized and the source of funding: NIL
21. Student profile course-w ise

|  | Year 2011 |  |  | Women |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | UG | PG | Total | UG | PG | Total |
| Admitted to the programme (entry year) | 75 | 15 | 90 | 10 | 06 | 16 |
| Drop-outs | 04 | 02 | 06 | Nil | Nil | Nil |
| Appeared for the final year examination | 71 | 13 | 61 | 10 | 06 | 16 |
| Passed in the final exam | 68 | 12 | 58 | 09 | 05 | 14 |
| Passed in I class | 15 | 09 | 24 | 05 | 03 | 08 |

22. Diversty of students:

| Name of the <br> Course <br> (refer <br> question no. <br> 2) | \% of <br> students <br> from the <br> College | \% of students <br> from the <br> State | \% of students <br> from other <br> States | \% of <br> students <br> from <br> other <br> countries |
| :---: | :---: | :---: | :---: | :---: |
| Both UG\& PG | 05 | 80 | 15 | NIL |

23.How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
03 in the last five years
24. Student progression

| Year | UG to PG (\%) | PG to Research(\%) |
| :--- | :---: | :---: |
| 2007 | 36 | 14 |
| 2008 | 38 | 11 |
| 2009 | 30 | 08 |
| 2010 | 34 | 07 |
| 2011 | 35 | 08 |

25. Diversity of staff

| Percentage of faculty who are graduates |  |
| :--- | :--- |
| of the same parent university | 01 |
| from other universities within the State | 01 |
| from other universities from other States | 01 |

26.Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

NIL
27.Present details about infrastructural facilities
a) Library: Yes the Departmental has a Library with 1072 books.
b) Internet facilities for staff and students $\checkmark$
28. Number of students of the department getting financial assistance from College.
Students are generally provided financial assistance from the state government.
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
Not applicable at present but there are preparations for starting environmental chemistry.
30. Does the department obtain feedback from
g. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
h. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
i. alumni and employers on the programmes and what is the response of the department to the same?

This is done on a college basis and reviewed for appropriate measures.
31.List the distinguished alumni of the department (maximum 10)
32.Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.
Lectures of distinguished speakers are organised regularly. The students are also encouraged to take active part in the departmental seminars and speak to the audience. This helps in improving their communication skills considerably.
33. List the teaching methods adopted by the faculty for different programmes. Generally the conventional method is used but at times presentation involving multimedia is used when necessary.
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Through mid-sem and end sem evaluation
35.Highlight the participation of students and faculty in extension activities.

Extension activities of the department include tree planting and de velopment of a botanical garden.
36.Give details of "beyond syllabus scholarly activities" of the department. NIL
37.State whether the programme/ department is accredited/ graded by other agencies. Give details.

No
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths

1. Large infrastructure
2. Well qualified committed faculty
3. Research-oriented activity
4. Dedicated non-teaching staff
5. Good laboratories
6. Excellent success rate
7. Cordial relationship between staff and students
8. Collective leadership encouraged by the present principal
9. Extra-curricular and sports activities

Weaknesses
11.No national or international linkage
12.Some teaching and non-teaching posts lying vacant
13.No consultancy services
14. Lack of autonomy in financial matters due to the control of the university and government
15.Space in the college given to P. G. departments of Science Faculty Opportunities
5. Opening of new courses
6. Opportunities for the tribal population.

## Challenges

1. To start Diploma course in Environmental Chemistry as a new and innovative course.
2. Future plans of the department.

To revamp its laboratory.

## Department of Physics

## 1. Faculty profile, adequacy and competency offaculty

1. Name and address of the department: Department of Physics

Date of establishment of the department :1946
2. List the different programmes (Level of Study = UG/PG/PG/Ph.D./ Post Doctoral.) offered by the department together with the details required below:

| Programme | Level of Study | Cut-off Marks <br> at entry, in \% <br> B.A./B.Sc. Part - I Hons | Student <br> Strength |
| :--- | :---: | :---: | :---: |
| B.A./B.Sc. Part - II Hons | Bachelor | Do | 75 |
| B.A./B.Sc. Part - III Hons | Do |  | 74 |
| B.Sc. Part - I Gen \& Sub. | Do |  | 64 |
| B.Sc. Part- II Gen \& Sub. | Do |  | 127 |
| M.Sc. Part- | M asters |  | 52 |
| M.Sc. Part-I | Do |  | 15 |

3. Interdisciplinary courses and departments involved: Not applicable
4. Annual/semester/choice based credit system: Semester system
5. Participation of the department in the courses offered by other departments:

Not applicable.
6. Number of Teaching posts sanctioned and filled

| Nos. of sanctioned posts: 17 | Male | Female | Total |
| :--- | :---: | :---: | :---: |
| Total no. of Teachers. | $\mathbf{0 8}$ | $\mathbf{0 2}$ | $\mathbf{1 0}$ |
| Teachers with Ph.D. as the highest qualification. | 07 | 01 | 08 |
| Teachers with PG or equivalent as <br> thehighest qualification (Speafy) | 01 | 01 | 02 |

7. Faculty profile with name, qualif ication, designation, specialization.

| Name of the <br> Teacher | Designation | Highest <br> Qualification | Specialisation | Exp. <br> years | Age | Sex |
| :--- | :---: | :---: | :--- | :---: | :---: | :---: |
| 1.Dr. S.R. Sahu | Associate <br> Professor | Ph.D | X-Ray <br> Crystal. | $\mathbf{3 6}$ | 59 | M |
| 2.Dr. A.P. Saha | Associate <br> Professor | Ph.D | X-Ray <br> Crystal. | $\mathbf{3 8}$ | $\mathbf{6 1}$ | M |
| 3. Dr. A.K. <br> Akhoury | Associate <br> Professor | Ph.D |  |  |  | M |
| 4. Dr. N.N. Ojha | Associate <br> Professor | Ph.D |  |  | 56 | M |
| 5.Dr. S.C. Gupta | Associate <br> Professor | Ph.D. | X-Ray <br> Crystal. | $\mathbf{3 8}$ | $\mathbf{6 0}$ | M |
| 6.Dr. J.P. Sharma | Assistant <br> Professor | Ph.D. | Spectroscopy | 17 | $\mathbf{4 8}$ | M |
| 7. Dr. A. Kumar | Assistant <br> Professor | Ph.D. | Photonics | 03 | 29 | M |
| 8.Mrs. N. Singh | Assistant <br> Professor | M.Phil. | Solid state | 15 | 46 | F |
| 9.Dr. R.K. Jha | Associate <br> Professor | Ph.D. |  |  |  | F |
| 10. Rajesh kumar | Assistant <br> Professor | M.Sc. |  | 03 |  | M |

8. Percentage of classes taken by temporary faculty: Nil
9. Student/ teacher ratio: $\mathbf{1 7 . 5 0}$
10. Number of administrative staff: 01; Number of technic al staff: $\mathbf{0 2}$
11. Number of faculty with ongoing projects: NIL
12. Departmental projects funded by DST-FIST, DBT: NIL
13. Research facility/ centre with

State recognition $\times$
National recognition $x$
International recognition $\times$
14.Publications:

| Department | S. No | Name | Qual. | n <br> en <br> en |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Physics | 1 | AP SAHA | Ph.D | 0 | 4 |
|  | 2 | SR SAHU | Ph.D | 2 | 1 |
|  | 3 | NN OJHA | M.Sc. | 0 | 0 |
|  | 4 | RK JHA | M.Sc. | 0 | 0 |
|  | 5 | AK AKHOURI | Ph.D | 0 | 0 |
|  | 6 | N SINGH | M.Phil | 0 | 1 |
|  | 7 | B BHAGAT | M.Sc. | 0 | 0 |
|  | 8 | JP SHARMA | Ph.D | 0 | 0 |
|  | 9 | R KUMAR | Ph.D | 0 | 2 |
|  | 10 | A KUMAR | M.Sc. | 0 | 0 |

15. Details of patents and income generated: NL
16. Areas of consultancy and income generated: Not applicable.
17. Faculty recharging strategies: through refresher/orientation and workshop arranged by the academic staff college.
18. Student Projects: Percentage of students who have done in-house projects: 95 percent.

Percentage of students doing projects in collaboration with industries/institutions: 5 percent.
19. Awards/recognitions received at the national and international level by

## Faculty Not applicable

20.Seminars/ conferences/w orkshop organized and the source of funding:

NIL
21. Student profile course-w ise

|  | Year 2011 |  |  | Women |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | UG | PG | Total | UG | PG | Total |
| Admitted to the programme (entry year) | 62 | 16 | 78 | 35 | 12 | 47 |
| Drop-outs | 03 | 01 | 04 | Nil | Nil | Nil |
| Appeared for the final year examination | 59 | 15 | 74 | 35 | 12 | 47 |
| Passed in the final exam | 57 | 12 | 69 | 32 | 11 | 43 |
| Passed in I class | 16 | 09 | 26 | 07 | 05 | 12 |

22. Diversty of students:

| Name of the <br> Course <br> (refer <br> question no. <br> 2) | \% of <br> students <br> from the <br> College | \% of students <br> from the <br> State | \% of students <br> from other <br> States | \% of <br> students <br> from <br> other <br> countries |
| :---: | :---: | :---: | :---: | :---: |
| Both UG\& PG | 05 | 80 | 15 | NIL |

23.How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?
03 in the last five years
24. Student progression

| Year | UG to PG (\%) | PG to Research(\%) |
| :--- | :---: | :---: |
| 2007 | 36 | 14 |
| 2008 | 38 | 11 |
| 2009 | 30 | 08 |
| 2010 | 34 | 07 |
| 2011 | 35 | 08 |

25.Diversity of staff

| Percentage of faculty who are graduates |  |
| :--- | :--- |
| of the same parent university | 01 |
| from other universities within the State | 01 |
| from other universities from other States | 01 |

26.Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

NIL
27.Present details about infrastructural facilities
a) Library: Yes the Departmental has a Library with 1072 books.
b) Internet facilities for staff and students
28. Number of students of the department getting financial assistance from College.

Students are generally provided financial assistance from the state government.
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
Demand felt by the faculty and students - Curriculum formulationapproval by departmental council - approval by academic council approval by the Board of management- Approval by the University.
30. Does the department obtain feedback from
j. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
k. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

1. alumni and employers on the programmes and what is the response of the department to the same?

This is done on a college basis and reviewed for appropriate measures.

## 31.List the distinguished alumni of the department (maximum 10)

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

Lectures of distinguished speakers are organised regularly. The students are also encouraged to take active part in the departmental seminars and speak to the audience. This helps in improving their communication skills considerably.
33. List the teaching methods adopted by the faculty for different programmes.

Generally the conventional method is used but at times presentation involving multimedia is used when necessary.
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?
Through mid-sem and end sem evaluation
35.Highlight the participation of students and faculty in extension activities.

Extension activities of the department include tree planting and de velopment of a botanical garden.
36.Give details of "beyond syllabus scholarly activities" of the department. NIL
37. State whether the programme/ department is accredited/ graded by other
agencies. Give details.
No
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
Strengths

1. Large infrastructure
2. Well qualified committed faculty
3. Research-oriented activity
4. Dedicated non-teaching staff
5. Good laboratories
6. Excellent success rate
7. Cordial relationship between staff and students
8. Collective leadership encouraged by the present principal
9. Extra-curricular and sports activities

## Weaknesses

1. No national or international linkage
2. Some teaching and non-teaching posts lying vacant
3. No consultancy services
4. Lack of autonomy in financial matters due to the control of the university and government
5. Space in the college given to P. G. departments of Science Faculty Opportunities
6. Opening of new courses
7. Oppurtunities for the tribal population.

Challenges

1. To develop the newly started B.Sc. in Electronics. Future plans of the department.
2. Future plans of the department

To revamp its computer laboratory.

## Department of Zoology

## 1. Faculty profile, adequacy and competency of faculty

1. Name and address of the department: Department of Zoology

Date of establishment of the department :1946
2. List the different programmes (Level of Study = UG/PG/PG/Ph.D./ Post Doctoral.) offered by the department together with the details required below:

| Program me | Level of Study | Cut-off Marks <br> at entry, in \% | Student <br> Strength |
| :--- | :---: | :---: | :---: |
| B.A./B.Sc. Part - I Hons | Bachel or | $45 \%$ | 48 |
| B.A./B.Sc. Part - II Hons | Do |  | 34 |
| B.A./B.Sc. Part - III Hons | Do |  | 30 |
| B.Sc. Part - IGen \& Sub. | Do |  | 127 |
| B.Sc. Part- II Gen \& Sub. | Do |  | 52 |
| M.Sc. Part-I | Masters | $45 \%$ | 40 |
| M.Sc. Part-II | Do |  | 40 |

3. Interdisciplinary courses and departments involved: Not applicable
4. Annual/semester/choice based credit system: Semester system
5. Participation of the department in the courses offered by other departments:

Not applicable.
6. Number of Teaching posts sanctioned and filled

| Nos. of sanctioned posts: 15 | Male | Female | Total |
| :--- | :---: | :---: | :---: |
| Total no. of Teachers. | $\mathbf{0 9}$ | $\mathbf{0 5}$ | $\mathbf{1 4}$ |
| Teachers with Ph.D. as the highest qualification. | 08 | 05 | 13 |
| Teachers with PG or equi val ent as | 01 | 00 | 01 |
| thehighest qualification (Speaify) |  |  |  |

7. Faculty profile with name, qualif ication, designation, specialization.

| Name of the Teacher | Designation | Highest Qual. | Specialisation | Exp. years | Age | Sex |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.Dr. B. Mukherjee | Professor \& Head | $\begin{aligned} & \text { M.Sc. Ph.D. } \\ & \text { D.Sc. } \end{aligned}$ | Environmental Biology | 30 | 54 | M |
| 2. Dr. U. Singh | Professor | M.Sc. Ph.D. | Entomology | 38 | 62 | M |
| 3.DrM Gupta | Associate professor | M .Sc. Ph.D. | Entomology | 34 | 60 | M |
| 4. Dr N D Goswami | Associate professor | M .Sc. Ph.D. | Entomology | 33 | 57 | M |
| 5.Dr G Lakra | Associate professor | M .Sc. Ph.D. | Ichthy ology | 30 | 60 | F |
| 6. Dr. B. Mahato | Associate professor | M.Sc. Ph.D | Environmental Biology | 30 | 57 | M |
| 7. Dr S Besra | Associate professor | M .Sc. Ph.D. | Endocrinology | 28 | 54 | F |
| 8. Dr B Raza | Assistant Professor | M .Sc. Ph.D. | Ichthy ology | 15 | 57 | F |
| 9.Dr.A.K.Choudhary | Assistant Professor | M .Sc. Ph.D. | Environmental Biology | 11 | 42 | M |
| 10. Dr.S. Singh | Assistant Professor | M .Sc. Ph.D. | Entomology | 11 | 60 | F. |
| 11. Dr N. Lal | Assistant Professor | M .Sc. Ph.D. | Environmental Biology | 03 | 49 | F |
| 12.Dr.S.Ghosh | Assistant Professor | M .Sc. Ph.D. | Environmental Biology | 03 | 46 | M |
| 13. Dr.A. Trip athy | Assistant <br> Professor | M .Sc. Ph.D. | Cell Biology | 03 | 33 | M |
| 14.Dr. G. Baskey | Assistant Professor | M.Sc. Ph.D | Cell Biology | 03 | 33 | M |

8. Percentage of classes taken by temporary fac ulty: 04
9. Student/ teacher ratio: $\mathbf{1 1 . 8 6}$
10. Number of administrative staff: 04; Number of technical staff: $\mathbf{0}$
11. Number of faculty with ongoing projects: 07
Name Designation Funding agency Grant received
a. B.Mukherjee Professor UGC 9Lakhs60 thousand
b. G.Lakra
c. B. Mahato

Assoc. Professor
UGC
UGC
d. A. Tripathy
e. B. Raza
f. N. Lal

Assoc. Professor
UGC
Asst. Professar UGC
Asst. Professor UGC
g. G. Baskey

Asst. Professar UGC 1lakh 80 thousand 1 lakh 60 thousand 1lakh 60 thousand 1lakh 60 thousand 1lakh 60 thousand 1 lakh 60 thousand
12. Departmental projects funded by DST-FIST, DBT: NIL
13. Research facility/ centre with

State recognition $\times$
National recognition $\times$
International recognition $\times$
14. Publications: Public ations:

| Department | S. No | Name | Qual. | n <br> Zoology | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | B MUKHERJEE | D.Sc. | 5 | 20 |  |
|  | 2 | M GUPTA | Ph.D | 0 | 5 |
|  | 3 | ND GOSWAMI | Ph.D | 0 | 8 |
|  | 4 | B MAHATO | Ph.D | 3 | 8 |
|  | 5 | G LAKRA | Ph.D | 0 | 5 |
|  | 6 | S BESRA | Ph.D | 1 | 15 |
|  | 7 | B RAZA | Ph.D | 0 | 6 |
|  | 8 | A CHADHARY | Ph.D | 0 | 10 |
|  | 9 | S SINGH | Ph.D | 0 | 1 |
|  | 10 | S GHOSH | Ph.D | 1 | 9 |
|  | 11 | N LAL | Ph.D | 0 | 1 |


|  | 12 | A TRIPATHI | Ph.D | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 13 | G BASKEY | Ph.D | 0 | 1 |

15. Details of patents and income generated: NIL
16. Areas of consultancy and income generated: Not applicable.
17. Faculty recharging strategies: through refresher/orientation and workshop arranged by the academic staff college.
18. Student Projects: Percentage of students who have done in-house projects: 95 percent.
Percentage of students doing projects in collaboration with industries/institutions: 5 percent.
19. Awards/recognitions received at the national and international level by Faculty Not applicable
20.Seminars/ conferences/workshop organized and the source of funding: NIL
20. Student profile course-w ise

|  | Year 2011 |  |  | Women |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | UG | PG | Total | UG | PG | Total |
| Admitted to the programme (entry year) | 62 | 40 | 102 | 36 | 28 | 64 |
| Drop-outs | 05 | 06 | 11 | Nil | Nil | Nil |
| Appeared for the final year exami nation | 57 | 34 | 91 | 34 | 25 | 59 |
| Passed in the final exam | 54 | 34 | 88 | 32 | 25 | 43 |
| Passed in I class | 16 | 25 | 41 | 08 | 18 | 26 |

22. Diversty of students:

| Name of the <br> Course <br> (refer <br> question no. <br> 2) | \% of <br> students <br> from the <br> College | \% of students <br> from the <br> State | \% of students <br> from other <br> States | \% of <br> students <br> from <br> other <br> countries |
| :---: | :---: | :---: | :---: | :---: |
| Both UG\& PG | 05 | 80 | 15 | NIL |

23.How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

04 in the last five years
24. Student progression

| Year | UG to PG (\%) | PG to Research(\%) |
| :--- | :---: | :---: |
| 2007 | 36 | 14 |
| 2008 | 38 | 11 |
| 2009 | 30 | 08 |
| 2010 | 34 | 07 |
| 2011 | 35 | 08 |

25.Diversity of staff

| Percentage of faculty who are graduates |  |
| :--- | :--- |
| of the same parent university | 09 |
| from other universities within the State | 01 |
| from other universities from other States | 03 |

26.Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

One
27.Present details about infrastructural facilities
a) Library: Yes the Departmental has a Library with 900 books.
b) Internet facilities for staff and students $\checkmark$
28. Number of students of the department getting financial assistance from College.

Students are generally provided financial assistance from the state government.
29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.
The department has started M.Sc. Environmental Sciences from 2011. This was necessary because the course is not available anywhere in the state. There is a growing demand of the course because of the awareness of the deteriorating environmental conditions and steps are needed for its abatement. The department formulated the curriculum with the help of experts in the subject and passed it through the departmental council. Once approved it went through the academic council and board of management and was sent to the University for their approval.

The same exercise was taken up for starting a special paper in Cytology and Molecular genetics.
30. Does the department obtain feedback from
m. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
n. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
o. alumni and employers on the programmes and what is the response of the department to the same?

This is done on a college basis and reviewed for appropriate measures.
31.List the distinguished alumni of the department (maximum 10)
32.Give details of student enrichment programmes (special lectures /
workshops / seminar) with external experts.
Lectures of distinguished speakers are organised regularly. The students are also encouraged to take active part in the departmental seminars and speak to the audience. This helps in improving their communication skills considerably.
33.List the teaching methods adopted by the faculty for different programmes.

Generally the conventional method is used but at times presentation involving multimedia is used when necessary.
34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Through mid-sem and end sem evaluation
35.Highlight the participation of students and faculty in extension activities.

Extension activities of the department include tree planting and de velopment of a botanical garden.
36.Give details of "beyond syllabus scholarly activities" of the department. NIL
37. State whether the programme/ department is accredited/ graded by other agencies. Give details.
No
38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
Strengths
10.Large infrastructure
11. Well qualified committed faculty
12.Research-oriented activity
13. Dedicated non-teaching staff
14.Good laboratories
15. Ex cellent success rate
16. Cordial relationship between staff and students
17. Collective leadership encouraged by the present principal
18. Extra-curricular and sports activities

Weaknesses
6. No national or international linkage
7. Some teaching and non-teaching posts lying vacant
8. No consultancy services
9. Lack of autonomy in financial matters due to the control of the university and government
10.Space in the college given to P. G. departments of Science Faculty Opportunities
3. Opening of new courses
4. Oppurtunities for the tribal population.

## Challenges

1. To develop the newly started courses in such a way as to create a potential among the students and provide them with aprofessional touch so that they may be able to get suitable placements.

## 39. Future plans of the department

To start a full-scale Department of Environmental sciences.


Publications by faculty (last 5 years):


Average citation index and impact factor of publications: 0.5

