

Evaluative Report of the Department

1. Name of the Department- Dept. of Physics
2. Year of establishment- UG-1989
 1. PG- 2021
3. Is the Department part of a School/Faculty of the university? – No
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
 - i- UG- B.Sc. (Physics, Chemistry, Mathematics)
 - ii- PG- M.Sc. Physics
5. Inter disciplinary programmes and departments involved-
Value Added Course on “Research Methodology” for all the students of PG classes has been jointly conducted by IQAC, dept. of Physics and Dept. of Mathematics
6. Courses in collaboration with other universities, industries, foreign institutions, etc.- Nil
7. Details of programmes discontinued, if any, with reasons- Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System
 - i- UG- Annual
 - ii- PG- Semester
9. Participation of the department in the courses offered by other departments-Value Added Course on “Research Methodology” for all the students of PG classes has been jointly conducted by IQAC, dept. of Physics and Dept. of Mathematics
10. Number of teaching posts sanctioned, filled and actual (Professors/AssociateProfessors/Asst.Professors/others)

	Sanctioned	Filled	Actual(including CAS&MPS)
Professor			
AssociateProfessors			
Asst.Professors	01 + 01 (self-financing)	01+ 01	01+ 01
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. G Nag Bhargavi	M.Sc., M. Phil, Ph.D	Assistant Professor	Condensed Matter Physics	15 -UG 02-PG	02 (Ph.D)
Ku. Charu Verma	M.Sc., B.Ed.	Assistant Professor	Electronics	02-UG 02-PG	-

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

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

i- PG- 50%

ii- UG-40%

14. Program-wise Student Teacher Ratio –

UG- 75:1

PG- 13:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual – 01

	Sanctioned	Filled	Actual (including CAS&MPS)
Lab Technician	01	Nil	Nil
Lab Attendant	01	Nil	Nil
Others		01 (self financing)	01 (self financing)

16. Research thrust areas as recognized by major funding agencies- Nil

17. Number of faculty with on going 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.- Nil

18. Inter-institutional collaborative projects and associated grants received- NIL

a) National collaboration

b) International collaboration

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

20. Research facility/centre with

- a. State recognition- Nil
- b. national recognition- Nil
- c. 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)- 15
- * Monographs- nil
- * Chapters in Books- 02
- * Edited Books- nil
- * Books with ISBN with details of publishers- Nil
- * Number listed in International Database (For e.g.Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.)
- * Citation Index–range/average
Range- 1 to 32
Average – 16.5
- * Impact Factor– range/average
Range – 0.5- 5.532
Average- 3.016
- * h-index- 6

23. Details of patents and income generated- Nil

24. Areas of consultancy and in come generated- Nil

25. Faculty selected nationally/internationally to visit other laboratories/institutions /industries in India and abroad- 01 (Dr. G Nag Bhargavi, for laboratories in India)

26. Faculty serving in

- a) National committees- 01- Dr. G Nag Bhargavi, (life member, Luminescence Society of India)
Member- Institute of Scholars
- b) International committees- Nil
- c) Editorial Boards
- d) anyother (please specify)-
 - Member, State level SSR review committee

Reviewer of-

- International Journal of Institute of Scholars
- IOP Conference Series: Materials Science and Engg.
- ECS Journal of Solid State Science and Technology
- Journal of Korean Ceramic Society
- IOP conference Proceeding- NSSEMA-2023
- Journal of material science: materials in electronics

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).

Name of faculty- Dr. G Nag Bhargavi

S.No	Name of program	Name of academic staff college	Duration
1	Orientation Program	Academic Staff College, Guru Ghasidas Vishwavidyala, Bilaspur (CG)	19 th May. 2014- 14 th Jun. 2014
2	Refresher Course	Academic Staff College, Guru Ghasidas Vishwavidyala, Bilaspur (CG)	13 th Jun. 2016- 2 nd Jul. 2016
3	Short term course on Recent trends in Materials Science II	Department of Physics, National Institute of Technology, Raipur, (CG)	30 th Sep.- 4 th Oct. 2013
4	Refresher Course in Physics	UGC- Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur, (CG)	16 th -28 th August 2021
5	Refresher Course in Physics	UGC- Human Resource Development Center, Gujarat University, Ahmedabad	21 st Jun. 2022- 4 th Jul. 2022

28. Student projects

- Percentage of students who have done in – house projects including inter-departmental projects-
 - 27% (3 out of 11 students of M. Sc. Physics- IV semester)
 - 100% (all students of B. Sc. I year done project in environmental studies)
- Percentage of students doing projects in collaboration with other universities /industry/institute-
 - 73% (8 out of 11 students of M. Sc. Physics- IV semester)

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

Faculty-

S.No	Name of Award	Awarding Agency	Year
01.	Chhattisgarh Young Scientist Award in Physics discipline	Chhattisgarh Council of Science and Technology	2018
02.	Chhattisgarh Young Scientist Award in Physics discipline (First Runner)	Chhattisgarh Council of Science and Technology	2017
03.	Best Poster Competititon (in National Seminar)	Govt. Digvijay PG Autonomous college Rajnandgaon (CG)	2018
04.	Best Research Paper Award (in National Seminar)	Dr.Radhabai Naveen KanyaMahavidyalaya, Raipur, (CG)	2015
05	SadbhavanNaari Shakti Samman	SadbhavanaSahityaSansthan, Raipur (CG)	2018
06	Young Researcher Award 2021	Institute of Scholars, Bengaluru, Karnataka	2021

Doctoral/post doctoral fellows-NIL

Students- NIL

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

S. No	Conferences/Seminar/workshop organized	Duration	Source of funding	Details of outstanding participants
1	National Seminar on Advanced Materials for Sustainable Industrial and Social Applications – NSAMSISA-2020	17 th -18 th Jan. 2020	Funded by local industrial establishments	Prof. K L Verma, Pt. RavishankarShukla University, Raipur, (CG) Prof. P K Bajpai, GGU, Bilaspur, (CG) Dr.TanmayaBadapanda, C V Raman Global University Bhubaneshwar, Odisha

				<p>Prof. Nameeta Brahme, Pt. Ravishankar Shukla University, Raipur, (CG)</p> <p>Dr. Sanjib Banerjee, Indian Institute of Technology, Bhubaneswar, (CG)</p> <p>Dr. Ayush Khare, National Institute of Technology, Raipur (CG)</p> <p>Dr. S K Rout, Birla Institute of Technology, Mesra, Ranchi, India</p> <p>Dr. Kallol Ghosh, Pt. Ravishankar Shukla University, Raipur, (CG)</p> <p>Dr. Kamlesh Shrivastava, Pt. Ravishankar Shukla University, Raipur, (CG)</p> <p>Dr. Manmohan Satnami, Pt. Ravishankar Shukla University, Raipur, (CG)</p>
2	National Seminar on Characterization and Processing of Advanced Materials- NSCPAM-2021	26 th June-2021	Janbhagidari Samiti	<p>Dr. Nimai Pathak, BARC, Mumbai</p> <p>Dr. Manoranjan Kar, IIT, Patna</p> <p>Dr. Tanmaya Badapanda, CVRGU, Bhubaneswar</p>
3	One-week Virtual	16 th -21 st	By registration of	Dr. Ananta Prasad Chakraverty,

	Workshop on Advanced Characterization Tools: Fundamentals and Applications	May 2022	participants	Gangadhar Meher University, Sambalpur Dr. Kamal Kumar Pandey, Sri Jai Narayan Mishra PG College Lucknow (KKC) Dr. Satya Narayan Tripathy, Sri Sri University, Cuttuck Dr. Manoranjan Kar, Indian Institute of Technology, Patna Dr. S K Rout, Birla Institute of Technology, Mesra Dr. Ayush Khare, National Institute of Technology, Raipur
4	Two days National seminar on National Seminar on Advanced Materials and Characterizations	26 th -27 th Aug. 2022	By registration of participants	Prof. S Panigrahi, NIT, Rourkela Dr. Manoranjan Kar, IIT, Patna Dr. M P Sharma, GGU, Bilaspur Dr. (Mrs) Ela Sinha, BIT, Mesra
5	Energy Conservation Day -2022	14 th Dec. 2022	Chhattisgarh renewable energy development agency	Dr. Govind Prasad Sahu, PRSU, Raipur
6	National Science Day-2023	27 th -28 th Feb. 2023	Chhattisgarh Council of Science and Technology	Dr. Govind Prasad Sahu, PRSU, Raipur Prof. Anjali Oudhia, GNPG College Raipur

31. Code of ethics for research followed by the departments-

The college has a structured research cell and it has a research policy and all the faculties are strictly bound to follow the policy. The research policy is uploaded on the

website.

32. Student profile programme- wise:

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.Sc. I (2022-23)	173	21	24	14	21
B.Sc. I (2021-22)	193	25	39	100	100
B.Sc. I (2020-21)	152	27	23	96	100
B.Sc. I (2019-20)		33	28	52	64
B.Sc. I (2018-19)		31	25	65	64
M.Sc. I (2021-22)	15	6	5	100	100
M.Sc. I (2022-23)	331	3	12	100	100

33. Diversity of students

Name of the Programme (refer to question no.4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
UG	100%			
PG	87%	13%	-	-

*All the students at UG level are from State Board of Secondary Education.

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

Name of Exams	Name of Candidates
NET	Sanjay Baghel (2017 pass out Batch)
SET	
GATE	
Civil services	
Defense Services	
CG TET (Teacher Eligibility Test)/ CTET(Central)	Charu Verma (2018 UG pass out Batch), Sheetal Verma (2019 PG pass out Batch), Manisha Verma (2021 PG pass out Batch), Shweta Verma (2020 UG pass out Batch), Anjali Verma (2020 UG pass out Batch)

	SatyavatiVerma (2018 UG pass out batch)
State Civil Services	Sanjay Baghel (2017 pass out Batch)
Others	

35. Student progression

Student progression	Percent against enrolled				
	Y1 (18-19)	Y2 (19-20)	Y3 (20-21)	Y4 (21-22)	Y5 (22-23)
UG to PG	69%	41%	25%	39%	
PG to M.Phil.					
PG to Ph.D.					
Ph.D. to Post-Doctoral					
Entrepreneurs			2%		
Others (B.Ed.)	6%	16%	6%	3%	
(PGDCA)		22%	14%	13%	
B. P. Ed.				1%	

S.N.	Name of the students	Pass out year	Employed in
1.	SheetalVerma		Guest faculty, Govt. Pt. ShayamacharanShukla college Dharsiwa
2	CharuVerma		Guest faculty, Govt. Pt. ShayamacharanShukla college Dharsiwa
3	Rama Manikpuri		Guest faculty, Govt. D B Girls' PG College Raipur
4	DeekshaSahu		Lab. Assistant, Govt. Pt. ShayamacharanShukla college Dharsiwa
5	Sanjay Baghel		Assistant Professor, Govt. Girls' College Baloda Bazar
6	Sunil		Taxation Assistant, Income tax department
7	ManojDewangan		Chemist, AdorWeldings, Raipur
8	Ravindra		Shivam public school, Parastarai
9	Durgesh		Railway Recruitment Board
10	Dolly Manikpuri		PGT- Physics, Champion School Raipur
11	NakulSahu		Shivansh International School Dharsiwa
12	VivekVerma		Assistant Chemist, BhagwatipowerplantSilatara
13	DushyantVerma		Assistant Professor, Sainath College Parastarai
14	SuneetVerma		
15	NiveditaVerma		Sports teacher, Eklavya Govt. Higher Sec. School, Bhoring
16	RashmiVerma		Govt. Higher Secondary School Gariyaband
17	ShaliniSahu		GyanPratapVidyamandir School, Birgaon

36. Diversity of staff

Percentage of faculty who are graduates	
Of the same university	50%
From other universities within the State	50%
From universities from other States from	-
Universities outside the country	-

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- 850(UG+PG)
- b) Internet facility for staff and student- yes available with Wi-fi connection
- c) Total number of classrooms-04ClassroomswithICTfacility- 03
- d) Class rooms with ICT facility- 03
- e) Student's laboratories- 04(Mechanics Lab, dark room, computer lab, electronics Lab)
- f) Research Laboratories- Nil

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

a) From the host institution/university

b) From other institutions/universities- 02

S. No.	Name of the student Pursuing Ph. D	Name of the institute/ research center
1	Sanjay Baghel	Pt. Ravishankar Shukla University, Raipur (CG)
2	Pawan Kumar	Govt. NPG College of Science Raipur, (CG)
3	Yuvraj Singh Jagat	Pt. Ravishankar Shukla University, Raipur (CG)

Note- The candidates Pawan Kumar and Yuvraj Singh Jagat are pursuing Ph. D under the supervision of Head of the department, Dr. G Nag Bhargavi. As per the Ph. D ordinance issued by the affiliating university both the candidates had to opt research centers enlisted by university. Since our college is not recognized as research center for Ph. D in Physics.

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

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

The IQAC obtains feedback from the students and parents every year. In the feedback some of the students have suggested to start PG in Physics. Also, many students and parents suggested their opinion on starting M Sc. Physics in the parent's teachers meeting. On the basis of the feedback and also on the oral feedback received from the students and finally on the opinion given by the principal a proposal (under self-financing) has been submitted to the Commissioner, Department of higher education, Govt. of Chhattisgarh, Raipur. And after getting permission from the Commissioner, Department of higher education, Govt. of Chhattisgarh, Raipur M. Sc. in Physics has been started.

42. Does the department obtain feedback from

- Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
- Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
- Alumni and employers on the programmes offered and how does the department utilize the feedback?

The department individually do not follow a system of obtaining feedback from the stakeholders (faculty, students, alumni and employers). However, IQAC of the college has developed a system of obtaining feedback from the stakeholders every year.

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

- Sanjay Baghel,
- Ku. Dolly Manikpuri
- Ku. CharuVerma
- Ku. SheetalVerma
- PrateekSahu
- Ku. DeekshaSahu
- MayankSahu
- Rama Manikpuri
- SatyavatiVerma
- SaritaVerma

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

Year	Name of the activity	Nature of activity	External experts
2018-19			
2019-20	National seminar on “Advance Materials for Sustainable Industrial and Social Applications” NSAMSISA-2020	Seminar	Prof. K L Verma, Pt. RavishankarShukla University, Raipur, (CG) Prof. P K Bajpai, GGU, Bilaspur, (CG) Dr. TanmayaBadapanda, C V Raman Global University Bhubaneshwar, Odisha Prof. NameetaBrahme, Pt. RavishankarShukla University, Raipur, (CG) Dr. Sanjib Banerjee, Indian Institute of Technology, Bhilai

			<p>(CG)</p> <p>Dr. AyushKhare, National Institute of Technology, Raipur (CG)</p> <p>Dr. S K Rout, Birla Institute of technology, Mesra, Ranchi, India</p> <p>Dr. KallolGhosh, Pt. RavishankarShukla University, Raipur, (CG)</p> <p>Dr. KamleshShrivastava, Pt. RavishankarShukla University, Raipur, (CG)</p> <p>Dr. ManmohanSatnami, Pt. RavishankarShukla University, Raipur, (CG)</p>
2020-21	Science Lectures series	Special lecture	Shri S K Rathore, Govt Naveen College Baloda
	National Science Day-2021	Special lecture	Dr. Kamal Pandey, Sri J N Mishra PG college (KKC), University of Lucknow
	World Water Day-2021	Special lecture	Dr. PreetiSoni, Govt. GNA PG college Bhatapara
2021-22	National Seminar Characterization and Processing of Advanced Materials	Seminar	Dr. NimaiPathak, BARC, Mumbai Dr. Manoranjankar, IIT, Patna Dr. TanmayaBadapanda, CVRGU, Bhubaneswar
	Science Lectures series	Special lecture	Prof. AwanishUpadhyay, GEC, Raipur
	Career opportunities in Physics	Special lecture	Shri. Sanjay Baghel, Govt. Girls College Baloda bazar
	National Science day-2022	Special lecture	Dr. N K Chakradhari, PRSU, Raipur
	Preparation Strategy for CSIR-NET	Special lecture	Dr. TriptiRichhariya, Kalinga University, Raipur
	National level workshop on “Advanced Characterization Tools-Fundamentals & Applications”	Workshop	Dr. Ananta Prasad Chakraverty, GangadharMeher University, Sambalpur Dr. Kamal Kumar Pandey, Sri jai Narayan Mishra PG College Lucknow (KKC)

			Dr. Satya Narayan Tripathy, Sri Sri Sri University, Cuttuck Dr. Manoranjan Kar, Indian Institute of Technology, Patna Dr. S K Rout, Birla Institute of Technology, Mesra Dr. Ayush Khare, National Institute of Technology, Raipur
2022-23	National Seminar on Advanced materials & Characterizations-2022	Seminar	Prof. S Panigrahi, NIT, Rourkela Dr. Manoranjan Kar, IIT, Patna Dr. M P Sharma, GGU, Bilaspur Dr. (Mrs) Ela Sinha, BIT, Mesra
	Training in Astronomy, Research & Education (TARE)	Workshop	Dr. N K Chakradhari, PRSU, Raipur
	Career opportunities in Plastic technology	Special lecture	Nilesh Sharma, CIPET, Raipur
	National Science Day -2023	Special lecture	Dr. Govind Prasad Sahu, PRSU, Raipur Prof. Anjali Oudhia, GNPG College Raipur
	Luminescence and its applications	Special lecture	Dr. Ashish Tiwari, Dr. B R Ambedkar Govt. College Pamgarh
	Value added course on Research methodology	Special lecture	Dr. Tanmaya Badapanda, CVRGU, Bhubaneswar

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

- Using Chalk and Talk
- Group discussions
- Oral questions
- Assignments
- Class tests, internal assessments
- Through powerpoint presentation
- Video lectures
- NPTEL lectures, e-contents

- Class room seminar presented by students
- Field visits, educational tours
- Projects and models
- Quiz competitions
- Laboratory sessions

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

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

- The department has organized Energy conservation week cum National Mathematics Day-2021 during 20-22, Dec. 2021. On this occasion the students Govt. Higher Secondary School Mandhar and Govt. Higher Secondary School Parastarai were invited to visit the science models exhibition made by the students. Also, an invited talk was delivered by Dr. Govind Prasad Sahu, PRSU, Raipur on Life and works of SrinivasRamanujan
- The students of Bsc III 2018-19 pass out batch during education tour visited Nandan Steels Ltd. Siltara and there the students have planted saplings with in the campus.
- On the occasion of national Mathematics Day-2022, two days program has been organized by department of mathematics during 21-22, Dec. 2022. On this day faculty and students of the department visited Swami Atmanand Eng. Med. School Kunra and interacted with the students of higher secondary.
- Head of the department Dr. Bhargavi and Prof. Kaushal Kishore visited Prakash Industries Birgaon and there they planted saplings in the campus.

48. Give details of “beyond syllabus scholarly activities” of the department.

Year	Name of the activity	Nature of activity	External experts
2021-22	Value added course on Renewable Energy and Technology	Value added Course	Dr. NeetuHarmukh, Govt. DB PG Girls’ College Raipur Prof. Sanjay Tiwari, management, Pt. RavishankarShukla University, Raipur Dr. AyushKhare, NIT Raipur ShriKaushal, GPSSC Dharsiwa
2019-20	National seminar on “Advance Materials	Seminar	Prof. K L Verma, Pt. RavishankarShukla University,

	for Sustainable Industrial and Social Applications” NSAMSISA-2020		<p>Raipur, (CG)</p> <p>Prof. P K Bajpai, GGU, Bilaspur, (CG)</p> <p>Dr. TanmayaBadapanda, C V Raman Global University Bhubaneswar, Odisha</p> <p>Prof. NameetaBrahme, Pt. RavishankarShukla University, Raipur, (CG)</p> <p>Dr. Sanjib Banerjee, Indian Institute of Technology, Bhubaneswar (CG)</p> <p>Dr. AyushKhare, National Institute of Technology, Raipur (CG)</p> <p>Dr. S K Rout, Birla Institute of technology, Mesra, Ranchi, India</p> <p>Dr. KallolGhosh, Pt. RavishankarShukla University, Raipur, (CG)</p> <p>Dr. KamleshShrivastava, Pt. RavishankarShukla University, Raipur, (CG)</p> <p>Dr. ManmohanSatnami, Pt. RavishankarShukla University, Raipur, (CG)</p>
2021-22	Value added course on Research methodology	Value added Course	<p>Prof. R. S. Kher, Principal, Govt. MadanlalShukla PG College Seepat</p> <p>Prof. Anjali Oudhia, Govt. Nagarjuna PG College of Science</p> <p>Dr. RashmiKujur, GPSSC Dharsiwa</p> <p>Dr. TanmayaBadapanda, C V Raman Global University, Bhubaneswar</p>
2022-23	Training in Astronomy, Research & Education (TARE)	Workshop	Dr. N K Chakradhari, PRSU, Raipur
2021-22	National Seminar Characterization and	Seminar	Dr. NimaiPathak, BARC, Mumbai Dr. Manoranjan, IIT, Patna

	Processing of Advanced Materials		Dr. TanmayaBadapanda, CVRGU, Bhubaneswar
2021-22	National level workshop on “Advanced Characterization Tools-Fundamentals & Applications”	Workshop	Dr.Ananta Prasad Chakraverty, GangadharMeher University, Sambalpur Dr. Kamal Kumar Pandey, Sri jai Narayan Mishra PG College Lucknow (KKC) Dr. Satya Narayan Tripathy, Sri Sri Sri University, Cuttuck Dr. ManoranjanKar, Indian Institute of Technology, Patna Dr. S K Rout, Birla Institute of Technology, Mesra Dr. AyushKhare, National Institute of Technology, Raipur
2022-23	National Seminar on Advanced materials & Characterizations-2022	Seminar	Prof. S Panigrahi, NIT, Rourkela Dr. ManoranjanKar, IIT, Patna Dr. M P Sharma, GGU, Bilaspur Dr.(Mrs) ElaSinha, BIT, Mesra

49. State whether the programme/department is accredited/graded by other agencies? If yes, give details. No

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

The department has started PG programme (MSc Physics) in the year 2021. Since the establishment the department is practicing academic activities like project works, model making competitions etc. for the students. Many electronic equipment, based on Programmable Computer Board (PCB) and Bread board are designed by the students. Also, the students were given training on PCB by external agencies. Apart from this the department also conducts project work in experimental condensed matter physics

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges(SWOC)ofthedeartment.

Strengths-

- Dedicated and qualified teachers
- Hardworking students.
- Involvement of students in all the academic activities.
- Disciplined and conducive learning environment.

Wi-Fi facility

Weaknesses-

- Insufficient teaching and non -teaching staff
- Poor economic background of students

- Lack of space (infrastructure) for lab and classroom sessions
- Less ICT facilities
- The number of reference and text books with different titles is very less in library
- English language issues with the students

Opportunities-

- To organize state/national level programs like conferences/ workshops.
- To sign MOUs with PG colleges for academic activities and research collaborations
- To conduct skill development programs
- To collaborate with local industrial establishments for tours and field visits
- To conduct faculty development program and value- added courses.

Challenges-

- To generate funds to enrich lab facilities.
- To develop research facilities.
- Encourage undergraduates to think multi dimensionally.
- Progression of students from UG to PG and from PG to higher studies due to weak economic background.
- To sanction post for teaching and non-teaching staff.

52. Future plans of the department-

- To enrich lab facilities for UG and PG classes.
- To equip classrooms and labs with ICT facilities.
- To establish research lab.
- To organize national and international conferences and workshop in offline mode.
- To sign MOUs for research as well as faculty exchange.
- To submit Minor research proposals.
- To conduct value added courses on “Nano science and Nanomaterials” and “Renewable energy and Technology”.
- To establish media center to record lectures.
- To use latest technology in teaching learning and evaluative process.
- Visit to national level laboratories by PG students.