

SELF STUDY REPORT

FOR

3rd CYCLE OF ACCREDITATION

GOVT. NAGARJUNA PG COLLEGE OF SCIENCE RAIPUR (CG)

GOVT. NPG COLLEGE OF SCIENCE, OPPOSITE NATIONAL INSTITUTE OF TECHNOLOGY (NIT) GE ROAD RAIPUR 492010

www.gnscr.ac.in

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1. EXECUTIVE SUMMARY

INTRODUCTION

Government Nagarjuna Post Graduate College of Science, Raipur, the most renowned institution of central India, has a unique stature as the best known destination for science. It has a rich history, an enviable legacy, a vibrant academic environment for science and research, experienced faculty, modern infrastructure, distinguished alumni, a verdant campus and a vast vision for the future. The peaceful and warm environment fosters solidarity and a strong sense of community. Dignified leadership and efficient governance are the hallmarks of the college.

The region's tryst with destiny was redeemed with the establishment of Science College on 2nd August, 1948. It fulfilled the political-economic-social needs and aspirations of the region. The college was initially opened with only 7 subjects and was housed in the Government Multipurpose Higher Secondary School, Chotapara, Raipur. The present structure was inaugurated on 18th July, 1954 by the first Chief Minister of Madhya Pradesh, Pt. Ravishankar Shukla. The college was initially affiliated to Dr Hari Singh Gaur University, Sagar, and shifted to Pt Ravishankar Shukla University in 1964. The college attained the status of Model College in 1984; Autonomous College in 1987; College for Potential for Excellence in 2010 and is presently the Lead College of the region.

Today it offers 11 PG programs, 15 UG combinations, 7 Research centres.BCA, DCA and PGDCA are also taught.

Vision

To provide quality education to create a zeal among the students of this tribal belt for overall improvement of the society through excellence in education and research. The value based education is the need of the hour, the institution aims to serve as a valuable resource for the country by producing intellectually capable, responsible citizens catering to the overall growth of the country.

Mission

In order to translate the vision into reality our mission is as follows:

- To adopt a teaching-learning technique conducive to the pursuit of knowledge enhancement, skill development and achieving excellence in higher education.
- To nurture self and community development by educating the students about socio-economic issues, religious harmony, environment and human rights by curricular and co-curricular activities.
- To provide quality education to the students belonging to the remote, educationally and economically backward, rural and tribal area.
- Synergistic contribution to the society through value added service

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Objectives

Assisting students to achieve their full potential through the concepts of learning as a continuing and perpetual process and by the promotion of an inclusive learning culture. Providing a range of inclusive quality educationand social care. Emphasis on developing the conviction of equality, social justice, improvement of education status of tribal girls and commitment to national integration. Incorporating individual learning and training programmes formulated to the needs of the students to achieve greater level of competency at the state and national level. Utilizing the college resources and managing them effectively and efficiently as per the needs of the students of this tribal belt. To make education a powerful medium and a tool to promote the social and economic development of community on the whole.

Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Govt. Nagarjuna PG College of Science stands unchallenged in offering quality education and learning experiences in the region. It proudly offers academic flexibility in a high number of courses in Science. Experienced and qualified faculty teach innovatively and interactively in well equipped classrooms and labs. Science Museums in Zoology, Botany, Geology and Defence Studies add to the learning experience. It has a strong research culture, as evidenced in the rise in the number of publications, registered guides and research centres. Harmony and team work in a participative democratic process define the work environment. The college has a high enrolment rate and low drop out; the academic results are good, and students move on to bright futures. Illustrious alumni serve the country in well placed roles. The green environment friendly campus is well located and is the emblem of excellence.

Institutional Weakness

The college attempts to offer the best in spite of certain lacuna. Sanctioned posts of faculty, office staff and class IV staff lie vacant and affect the functioning. Lab technicians are not properly trained and have to be trained by faculty within the tenure of lab courses. Being an affiliated college, there is only limited freedom in framing curricula and starting new courses, the process swamped by procedural delays. CBCS has not yet been implemented and is in the pipeline.

Institutional Opportunity

The prime location of the college in the educational hub, next to the University is a blessing. The potential for growth can be strengthened through research guidance and collaboration with academia. Opportunities for extension and social outreach programs can be spread further with financial help. More funds/ grants could be released to facilitate growth.

Institutional Challenge

The institutional challenge is in the lack of funds. A rise in global standards has raised expectations of students and other stakeholders for infrastructural development and the demand for new courses. Keeping abreast of the

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fast pace of change is difficult especially in a system where there is an influx of weak students from schools. More job oriented courses, research projects, society oriented programs, increasing employability and skill levels of students are challenges which the institution is attempting to overcome.

CRITERIA WISE SUMMARY

Curricular Aspects

The college offers maximum choices in basic sciences, interdisciplinary, multidisciplinary and applied sciences in the region. There are 7 research centres, 11 PG programs, 15 UG programs and UG and Diploma programs in computer application. Excellent academic output is achieved through well planned futuristic curricula that lead to brilliant scientific possibilities in research; employment and self employment. Outcomes tailored to learning needs of the 21st century are guided by a proactive Feedback system.

In the last five years, the college has introduced 3 new PG programs; and added new courses, and expanded the scope of others. In the physical sciences, new areas in ICT, nanotechnology, AI, materials modelling and others have been added. Interdisciplinary courses in the biological sciences lead to research, development and employment in agriculture and allied industry; genetics; medicine and health industry; ecology, biodiversity and environment management, geo-industries and others.

The college staunchly believes that gender, human values, ethics, SDG's and environment conservation are the crux of education and it has incorporated these in the curriculum.

Teaching-learning and Evaluation

The college explores creative and innovative pedagogies to shape the minds of its students and nurture higher order thinking skills that develop the scientific temper. The student centric methods employ experiential, participative and problem solving learning through seminars, workshops, hands on training programs, projects, field and industry visits. Special invited guest lectures provide interaction and exposure to experienced faculty. Along with traditional methods the latest trends of ICT based teaching and online resources are used. The college has a botanical garden; zoology and geology museums; well equipped departmental and central libraries; well instrumented laboratories and some wifi enabled classrooms. Collaborations with academia, government and non government bodies help in the learning process.

Examination reforms have improved the evaluation methods which are continuous and comprehensive and check learning outcomes efficiently. A 100% automated autonomous cell ensures secure, swift and efficient examination process, with an active feedback system and a grievance redressal cell in place.

The Academic calendar is followed rigorously and the Academic Audit ensures the efficiency of the learning-evaluation process.

Research, Innovations and Extension

The college is the most important and revered centre for research in Science in the region. The 7 research centres and offers support through infrastructure, well equipped laboratories, ICT facility, library, funds and

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administrative support. The number of PhD's as faculty is very high as is the number of PhD's produced. A Research Committee, Departmental Research Committees, Ethics cell, Plagiarism cell and the IQAC monitor the quality of research. Lectures and workshops are organised.

A number of research publications in UGC listed journals bears testimony to the research culture of the institution. A number of faculty members are recognised research guides. Active qualitative research work also continues in the Hindi and English departments as 2 faculty members in Hindi and 3 in English are registered research guides.

A significant innovative initiative has been the organisation of Entrepreneurship Awareness camps in collaboration with CITCON. Faculty Development programs have been organised, industry visits being integral.

Extension activities nurture core values of empathy and service to the community through active NSS, YRC and NCC units and Departmental committees. The college has adopted village Tendua under the Unnat Bharat Abhiyaan. Extension programs target health awareness, sanitation, cleanliness, anti plastic, blood donation, traffic rules, Van Mahotsav plantation drives, environment, SDG's, social issues, and electoral process (SVEEP). Sickle cell anaemia is a major health issue in CG and the college conducts camps to test and identify sufferers, and guides them for proper treatment. Others aim at value education, digital awareness, coaching and career guidance.

Infrastructure and Learning Resources

The infrastructure and campus of the college facilitate the pursuit of academic endeavours and complete holistic development of students. The college has appropriate number of classrooms, laboratories, museums, ramps, staffrooms, research labs, a well structured office, sports room, common rooms, and rest rooms. The automated library has the latest systems and offers both books and e-resources like Shodhganga, online journals, open access resource platforms, and MOOC programs. Library is equipped with SOUL 2 ILMS (Integrated Library Management Software). Departmental libraries house books for PG students and Research.

The college has built many new classrooms and the labs have been updated with new instruments and infrastructural changes. The Auditorium has been renovated with inbuilt acoustic and light systems. The e-classroom is used for academic lectures, seminars, workshops and other co curricular activities. The PWD maintains the campus; class IV employees keep the campus clean.

ICT and digitalisation drives have ensured that the office, the autonomous cell, the library, 20 classrooms, and the campus are equipped to access the world's best resources within seconds. IT and Computer Science departments are self financing. Buy Back option is used for managing e-waste. The campus' old trees stand sturdy witnesses to the growth of the college. The courtyard gardens, the botanical garden, an old Shiva temple, fish pond, green corridors add to the green vibrations the campus emits.

On campus residential facility is provided for faculty and staff. Students accommodated through three hostels for boys and one for girls. A dispensary, a post office, a popular canteen and play grounds cater to the needs of students.

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Student Support and Progression

The college nurtures its students and provides them excellent guidance and support. A warm relationship between qualified experienced devoted faculty and knowledge thirsty disciplined students helps to achieve the vision of the college. The college offers a beautiful green campus and good infrastructural support with proper ventilated classrooms, labs, libraries, sports room and sport fields, auditorium, doctor and dispensary, eclassroom, common rooms, gardens, canteen and a beautiful green others.

A strong time tested academic support system is in place. Apart from good approachable helpful faculty and a large number of courses, ICT enabled interactive classrooms, seminars, workshops, hands on training, field and industrial trips, induction programs, feedback system, academic guidance, coaching program for weak students are regular events. The academic performance of students is very good. Most of the students of the college move on for either research or jobs in government, private and self employment sectors.

A number of welfare schemes assist needy students in the form of financial relief, scholarships, and free help. Support system for the Divyang and economically poor students exists. The Equal Opportunity Cell, Anti Ragging Cell, Women Harassment Cell, Grievance Redressal Cell, Career Guidance and Placement Cell, Kaushal Vikas Cell and others form a robust student support system. The Student Council and other committees are actively involved in both academic and administrative roles. The Alumni offer financial, material and academic support.

Governance, Leadership and Management

The institution is guided by the Higher Education Department, CG Government, the UGC and the Pt Ravishankar Shukla University, Raipur. The Principal is the head of the institution. His visionary leadership and team building capacity are reflected in the smooth efficient functioning of the institution, and the attainment of the mission of imparting quality education, and moulding globally competent citizens who can carve a niche for themselves anywhere in the world.

Decisions are arrived at through a decentralized participative democratic process, worked to perfection, through the formation of various committees working under coordinators. The IQAC, Academic Council, Staff Council, Student Council, Janbhagidari Samiti, Finance Committee, Autonomous Cell and a number of others achieve the academic and administrative goals in a stable, secure and transparent system. All the stakeholders are represented in the process. Each department functions under the Head. The Registrar manages the office.

The recruitment of permanent faculty is through the government. Temporary faculty are selected through the college selection process. The welfare schemes for faculty and non teaching staff are financial aids, housing, medical leave and reimbursement, annual leaves and others. The faculty are inspired into self motivation through an annual Performance Based Appraisal System and Academic Audit. Leave is granted for FDPs.

Financial resources are through government, fees, UGC, RUSA, Janbhagidari Samiti, Autonomous cell and self financing schemes. Annual internal audit and external audits by Auditor General are done regularly.

The Academic Audit and Feedback system assure quality in academics. Digitalisation and internet connectivity of the Autonomous Cell, office and departments has brought in administrative swiftness and transparency.

Institutional Values and Best Practices

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The college has steadfastly maintained a deep sense of respect and love for the environment, rooted as it is in the pristine beauty of the region. A monument to the blend of tradition and modernity, the college is defined by academic excellence, scientific enquiry, technology, gender sensitivity, and an honest sincere sense of commitment and solidarity with the society.

The two best practices are: 1. Skill Development Initiatives for Achieving Local and Global Competencies 2. The Green Zeitgeist

The *Mahila Protsahan Puraskar* is a unique initiative to be found nowhere in the country. The program motivates and supports women in higher education in Science by awarding cash prizes to women students only.

The healthy gender sensitive environment is supported by the formalized Women Harassment and Gender Equity Cells. The college provides a safe campus, common rooms, hostels, counselling, guidance for self defence, financial relief and non financial support and equal opportunity at all levels.

The environment consciousness and sustainability drive is reflected in solid, liquid and e-waste management; rain water harvesting and green campus initiatives. The college has a solid waste management program. Vermicomposting and organic plantation is practiced. Initiatives are mainly by the Botany, Biotechnology and Microbiology departments. Paper waste is utilised through a tie up with Jagruti, an NGO dealing with waste paper management. Digitalising campus has reduced paper waste. A remarkable e-waste management program is in place.

Rain water harvesting of roof top and runoff water is in place and Recharge structures have been put in place through the efforts of Geology department, alumni, PWD and PG students. The Sustainability Cell plans setting up an Effluent Treatment Plant with government assistance.

Green campus initiatives include use of cycles and use of public transport by the majority of students and staff. Plastic free campus; paperless digital mechanisms; green corridors; plantation drives; natural gardens with less civil work; green forest look zones add to the green aura. The Eco Club and Garden Committee are active.

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2. PROFILE

BASIC INFORMATION

Name and Address of the College	
Name	GOVT. NAGARJUNA PG COLLEGE OF SCIENCE RAIPUR (CG)
Address	GOVT. NPG COLLEGE OF SCIENCE, OPPOSITE NATIONAL INSTITUTE OF TECHNOLOGY (NIT) GE ROAD RAIPUR
City	Raipur
State	Chhattisgarh
Pin	492010
Website	www.gnscr.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal(in- charge)	Radha Pandey	0771-2263131	7024924409	0771-226283 8	principal.npgcsr@ gmail.com
IQAC / CIQA coordinator	Anjali Oudhia	0771-2262121	9826733747	0771-226222	anjalioudhia@gmai l.com

Status of the Institution	
Institution Status	Government

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details

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Date of Establishment, Prior to the Grant of 'Autonomy'	01-01-1948
Date of grant of 'Autonomy' to the College by UGC	01-07-1989

University to which the college is affiliated				
State University name Document				
Chhattisgarh	Pt. Ravishankar Shukla University	View Document		

Details of UGC recognition			
Under Section Date View Document			
2f of UGC	08-10-2010	<u>View Document</u>	
12B of UGC	08-10-2010	<u>View Document</u>	

	gnition/approval by sta MCI,DCI,PCI,RCI etc		bodies like		
Statutory Recognition/App roval details Inst authority Regulatory Authority Regulatory nt programme Recognition/App Day,Month and year(dd-mm-yyyy) Remarks Remarks months					
No contents					

Recognitions		
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	Yes	
If yes, date of recognition?	18-03-2010	
Is the College recognized for its performance by any other governmental agency?	No	

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Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	GOVT. NPG COLLEGE OF SCIENCE, OPPOSITE NATIONAL INSTITUTE OF TECHNOLOGY (NIT) GE ROAD RAIPUR	Urban	61.45	36245	

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Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BCA,Compu ter Science	36	passed with any combination of subjects in class XII	English	50	50
UG	BSc,Chemist ry Botany Zoology	36	PCB upto XII	English,Hind	200	197
UG	BSc,Chemitr y Botany Geology	36	PCB upto XII	English,Hind i	30	30
UG	BSc,Chemist ry Zoology Geology	36	PCB upto XII	English,Hind i	30	30
UG	BSc,Chemist ry Botany Defence	36	PCB upto XII	English,Hind i	30	29
UG	BSc,Chemist ry Zoology Defence	36	PCB upto XII	English,Hind i	30	28
UG	BSc,Chemist ry Botany Microbiolog y	36	PCB upto XII	English,Hind i	40	38
UG	BSc,Chemist ry Botany Biochemistr y	36	PCB upto XII	English,Hind i	12	12
UG	BSc,Chemist ry Zoology Biochemistr y	36	PCB upto XII	English,Hind i	12	12
UG	BSc,Chemist ry Botany Biotech	36	PCB upto XII	English,Hind	30	30
UG	BSc,Chemist	36	PCB upto	English,Hind	30	30

	ry Zoology Biotech		XII	i		
UG	BSc,Physics Maths Chemistry	36	PCM upto XII	English,Hind i	210	200
UG	BSc,Physics Maths Info Tech	36	PCM upto XII	English,Hind i	63	59
UG	BSc,Physics Maths Computer Science	36	PCM upto XII	English,Hind i	63	60
UG	BSc,Physics Math Defence	36	PCM upto XII	English,Hind i	32	31
UG	BSc,Physics Maths Geology	36	PCM upto XII	English,Hind	32	30
PG	MSc,Physics	24	Graduation in Relevant Subject	English	25	25
PG	MSc,Chemis try	24	Graduation in Relevant Subject	English	20	20
PG	MSc,Maths	24	Graduation in Relevant Subject	English	30	30
PG	MSc,Zoolog y	24	Graduation in Relevant Subject	English	30	30
PG	MSc,Geolog y	24	Graduation in Relevant Subject	English	25	25
PG	MSc,Defenc e Studies	24	Graduation in Relevant Subject	English	25	25
PG	MSc,Informa tion Technology	24	Graduation in Relevant Subject	English	30	16

PG	MSc,Bioche mistry	24	Graduation in Relevant Subject	English	10	10
PG	MSc,Biotech nology	24	Graduation in Relevant Subject	English	15	15
PG	MSc,Mircro biology	24	Graduation in Relavant Subject	English	30	20
PG	MSc,Botany	24	Graduation in Relevant Subject	English	25	25
PG Diploma recognised by statutory authority including university	PGDCA,Co mputer Science	12	Graduation in any Subjects	English	30	30
Doctoral (Ph.D)	PhD or DPhil,Physic s	36	PG in Relevant Subject	English	8	0
Doctoral (Ph.D)	PhD or DPhi 1,Chemistry	36	PG in Relevant Subject	English	28	2
Doctoral (Ph.D)	PhD or DPhil,Maths	36	PG in Relevant Subject	English	12	0
Doctoral (Ph.D)	PhD or DPhil,Botna	36	PG in Relevant Subject	English	30	0
Doctoral (Ph.D)	PhD or DPhi 1,Zoology	36	PG in Relevant Subject	English	24	0
Doctoral (Ph.D)	PhD or DPhi 1,Geology	36	PG in Relevant Subject	English	12	1
Doctoral (Ph.D)	PhD or DPhi 1,Defence Studies	36	PG in Relevant Subject	English	4	2

Position Details of Faculty & Staff in the College

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	Teaching Faculty											
	Profe	Professor			Assoc	Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				11				0			1	73
Recruited	0	0	0	0	0	0	0	0	38	34	0	72
Yet to Recruit				11				0				1
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0	J			1
Recruited	0	0	0	0	0	0	0	0	1	0	0	1
Yet to Recruit		1		0				0		1	1	0

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	7			97
Recruited	35	11	0	46
Yet to Recruit				51
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

		Technical St	aff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				52
Recruited	25	8	0	33
Yet to Recruit				19
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit		200		0

Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0	
Ph.D.	8	10	0	0	0	0	18	21	0	57	
M.Phil.	0	0	0	0	0	0	0	3	0	3	
PG	0	0	0	0	0	0	6	6	0	12	

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

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

Details of Visting/Guest Faculties							
Number of Visiting/Guest Faculty	Male	Female	Others	Total			
engaged with the college?	4	11	0	15			

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
PG Diploma	Male	11	0	0	0	11
recognised by statutory	Female	15	0	0	0	15
authority including university	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	2	0	0	0	2
	Female	4	0	0	0	4
	Others	0	0	0	0	0
UG	Male	511	1	0	0	512
	Female	387	0	0	0	387
	Others	0	0	0	0	0
PG	Male	121	0	0	0	121
	Female	144	0	0	0	144
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	182	1721	187	259
	Female	103	98	118	189
	Others	0	0	0	0
ST	Male	244	210	265	201
	Female	167	146	153	135
	Others	0	0	0	0
OBC	Male	697	675	731	679
	Female	449	406	480	524
	Others	0	0	0	0
General	Male	268	268	256	265
	Female	368	380	338	330
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		2478	3904	2528	2582

EVALUATIVE REPORT OF THE DEPARTMENTS

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Chemistry Botany Defence	<u>View Document</u>
Chemistry Botany Microbiology	<u>View Document</u>
Chemistry Botany Zoology	View Document
Chemistry Zoology Biochemistry	View Document
Chemistry Zoology Biotech	<u>View Document</u>
Chemistry Zoology Defence	<u>View Document</u>
Chemistry Zoology Geology	<u>View Document</u>
Chemitry Botany Geology	<u>View Document</u>
Computer Science	<u>View Document</u>
Defence Studies	<u>View Document</u>
Geology	<u>View Document</u>
Information Technology	<u>View Document</u>
Maths	<u>View Document</u>
Mircrobiology	<u>View Document</u>
Physics	<u>View Document</u>
Physics Math Defence	<u>View Document</u>
Physics Maths Chemistry	<u>View Document</u>
Physics Maths Computer Science	<u>View Document</u>
Physics Maths Geology	<u>View Document</u>
Physics Maths Info Tech	<u>View Document</u>
Zoology	View Document

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
35	32	32	32	32

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

1.2

Number of departments offering academic programmes

Response: 14

2 Students

2.1

Number of students year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2582	2528	2514	2774	2479

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
874	719	639	604	539

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.3

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

2018-19	2017-18	2016-17	2015-16	2014-15
2623	2620	2507	2509	2506

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

Number of revaluation applications year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
326	502	435	427	406

3 Teachers

3.1

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

2018-19	2017-18	2016-17	2015-16	2014-15
447	353	353	353	353

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

3.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
72	57	55	54	54

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

3.3

Number of sanctioned posts year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
84	82	82	81	81

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4 Institution

4.1

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

2018-19	2017-18	2016-17	2015-16	2014-15
10185	11123	10100	5748	4787

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
729	663	663	663	663

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4.3

Total number of classrooms and seminar halls

Response: 36

4.4

Total number of computers in the campus for academic purpose

Response: 114

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4.5

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

2018-19	2017-18	2016-17	2015-16	2014-15
1	1	1	1	1



4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

Science is the defining feature of future development and the college is the unchallenged centre for science in CG, its curriculum being uniquely diverse and in line with global research in the field.

The college has been focussed, flexible, innovative and quality oriented in planning and updating the curriculum to achieve the above. The PO, PSO and CO fulfils these goals. (https://assessmentonline.naac.gov.in/storage/app/hei/SSR/105925/2.6.1_1605958561_4352.pdf)

The institution offers maximum number of interdisciplinary and multidisciplinary subject combinations in Science in CG. There are 11 programs at the PG level; 2 ICT based programs and 15 subject combinations at UG.7 research centres strive to become centres of excellence in the field of scientific research and development.

Notable initiatives in the last five years are through new courses and Curriculum update:

New courses:

The future local-global need of this knowledge-communication age is ICT, and so the college started MSc in Information Technology. MSc (Biochemistry) and MSc (Microbiology) were introduced, which are new interdisciplinary areas, very relevant in the world.

New papers:

ICT related changes:

- In B.C.A. 1st year, one new paper added titled "Web Technology and E- Commerce" which focuses on website designing and online merchandise.
- In Physics one ICT based paper was introduced along with a lab course in M.Sc. Ist semester.
- Diploma programs like PGDCA, DCA and BCA focus on ICT based multiple verticals like cyber security, technology framework and applications.

In the field of Physical and Biological Sciences, the growth of environment based industry; geodemographical development; health; These areas address these needs, and bring in sustainable development and provide employment.

• In Botany "Limnology" was introduced in M.Sc. IIIrd/IVth semester Population Ecology and Plant Pathology have been added.

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- In Zoology, elective courses based on Immunology were introduced in IVth semester which consist of two papers namely 1. Immune Pathology and 2. Immuno techniques focussed on recent research fields like Cancer Biology.
- Zoology department has introduced an elective subject on fisheries consisting of papers 1. Aquaculture and fisheries and 2. Ichthyology based on local needs.
- In Geology, two new papers have been introduced: 1. "Chhattisgarh Geology and Mineral Resources and their Industrial Applications" and 2. "Mining Legislation and Mineral Resource Development". Both focus on areas that provide employment, resource management in Chhattisgarh.
- In Defence Studies two new papers were introduced: 1. Internal Affairs of Peace and Security (MSc Defence Studies III semester) and 2. International Law (IV Semester). They address local naxal-maoist insurgency as well as local-global issues of peace.
- In Physics, ten new experiments based on SIESTA program on materials modelling have been introduced in M.Sc. III semester in alignment with developing simulation techniques. Two elective papers have been introduced: 1. "Physics of Nanomaterials and Devices" and 2. "Laser Physics and Applications". Keeping employability in view, Industry based projects (200 marks) have been introduced for MSc Physics IV Semester from 2017.

New chemistry practicals were added in analytical chemistry. BSc I year students submit project works on local environment issues in Environment Science.

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

Response: 27.27

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 35

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 0

File Description	Document
Minutes of relevant Academic Council/BOS meeting	<u>View Document</u>
Details of program syllabus revision in last 5 years(Data Template)	<u>View Document</u>
Link for Additional Information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 2.15

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1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development yearwise during the last five years..

2018-19	2017-18	2016-17	2015-16	2014-15
70	2	2	4	0

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document

Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 18.69

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

Response: 90

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

Response: 447

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

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 60

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

Response: 05

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

Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

Response:

Although the focus on higher education has increased worldwide the qualitative changes expected to be initiated through this education is completely missing. The crime against women has increased, values and ethics are missing from youth, environment is being harmed by greed driven industrialization.

Professional Ethics is a major issue in the academic field today. The Research Policy of the college follows the University guidelines for Plagiarism check to ensure professional ethics. Ethics Committee guidelines and certification are mandatory for all research thesis. Apart from research, other subjects also deal with professional ethics. The syllabus of MSc Physics paper on Nanotechnology has a segment on Societal implications of nanotechnology. MSc Defence Studies has a paper on International Affairs of Peace and Security. Ethics is a part of daily teaching.

Gender issues are addressed through a functional Women Harassment Cell. It works to create awareness for social and ethical issues amongst students and staff. Members of this cell sensitize all the students about the prevailing laws towards sexual harassment. Gender Audit was done by the cell and the report was published on the website.

Human values are practiced by students through NCC and NSS programmes. The college has three wings of NCC (Air Wing, Infantry, Signal division) and a big NSS unit along with a Youth Red Cross unit which work on social awareness programmes, gender issues, health issues and others. These programmes are designed to inculcate human values, team work and social sensitization. Every year a number of activities are organized as per schedule. These are compiled in criteria III.

The Youth Red Cross (YRC) focuses on health aspects where as NSS and NCC cover social services, cleanliness drives, blood donation and plantations.

Values like Gratitude, Interpersonal relations ,team work , greed are found in prescribed textbooks of Hindi and English.

Environmental issues are addressed in various courses like the undergraduate students have to compulsorily submit projects based on environmental issues every year, as part of the compulsory paper on Environment studies. Almost 700 projects are submitted every year as environment projects. BSc III Botany students study three units on environment, ecosystem, plant community and population, plant succession etc. B.Sc.-III Zoology covers Ecology, Environmental Biology are relevant to sustainability. B.Sc.-III Biotechnology students are taught topics like waste water treatment, global environment issues

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like acid rain, global warming and ozone depletion.

PG student of various streams are also taught relevant topics like M.Sc. Students study ecology in Botany semester III and IV M.Sc. Chemistry students also study environment in III semester.

PG student of Microbiology and Biotechnology study biogeochemical cycles, techniques of assessment and analysis of water and soil.

Document
View Document

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

Response: 0

1.3.2.1 How many new value-added courses are added within the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
List of value added courses (Data Template)	<u>View Document</u>

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 0

1.3.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document	
List of students enrolled	<u>View Document</u>	

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 34.48

1.3.4.1 Number of students undertaking field projects / internships / student projects

Response: 61

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document
Link for Additional Information	View Document

Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: B. Any 3 of the above

File Description	Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
Link for Additional Information	View Document

1.4.2 The feedback system of the Institution comprises of the following:

Response: B. Feedback collected, analyzed and action taken

File Description	Document	
Any additional information	<u>View Document</u>	
URL for stakeholder feedback report	<u>View Document</u>	

Criterion 2 - Teaching-learning and Evaluation

Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 98.34

2.1.1.1 Number of students admitted year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1100	955	1045	1052	1055

2.1.1.2 Number of sanctioned seats year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1164	1059	1059	1059	1059

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 12.59

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

2018-19	2017-18	2016-17	2015-16	2014-15
602	524	544	555	534

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File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document
Link for Additional Information	View Document

Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

The college is one of the oldest colleges of the state, and it strives to achieve excellence. Therefore, at the entry level itself the slow learners and advanced learners are identified as admission is on the basis of merit list.

The academic performance of students is reviewed by the teachers from unit test, quarterly and half-yearly exams, Lab courses and group discussions, interactions and class seminars along with previous result. This helps in categorizing the students as advanced learners and slow learners.

The students come from diverse socio-economic and educational backgrounds, and are mostly first generation learners, so sometimes they lack exposure, communication skills and resources consequently leading to poor results. However, the weak students are given special attention in the class. Their doubts and difficulties are cleared not only during the class but also whenever they approach their teachers.

An Induction program is conducted for the students to guide them about the subject. The Principal and Heads of the various subjects introduce the fundamental areas and method of study and evaluation.

During the classroom teaching the basics are repeatedly explained and the students are encouraged to do board work. Short questions are put up on the board in order to increase the level of comprehension. This helps the teachers to find out and rectify the problems of students. ICT is used in teaching to help students.

In order to cover the entire course, extra classes are conducted and it is ensured that there is complete participation of the students which result in interactive teaching-learning process.

To minimize the dropout rates of the students, mentoring system is in place. The teachers appointed as mentors of specific classes, try to solve academic, personal/ financial problems of students at their level. This helps in better results in exams, regular attendance, better discipline and respectful relationship between the teacher and students.

The weak learners are assigned to solve previous year question papers. Home assignments are given and timely surprise tests are taken by the teachers. Teachers encourage students for better performance, and guide them in how to study, make notes and prepare for the exams.

Invited lectures of subject experts from other institutes are also organized as extension lectures; this helps

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the weak student with the subject. Every department has a departmental library and teachers spare their books to the students.

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 35:1

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

Teaching- Learning Process

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

Response:

The academic plan of the College is student centric. Experiential and participatory learning and problem solving methodologies are used to make sure that students are dynamic participants rather than passive listeners in the teaching learning process. The various methods employed include special lectures, field study, projects-based-method, experiments, outreach activities and other ways for enriching the learning experience.

Experiential Learning:

The college is a science college and so the Time Table devotes 50% time to theory classes and 50% to lab courses. The college has good laboratories with advanced equipments. The teachers explain every topic and lab work makes the learning experiential. The classes are interactive. ICT aids also help in experiential learning. Visits to the botanical garden, museums enhance learning. Field and industrial visits are organized and hands on training programs have been conducted. Project work is a part of experiential learning.

Participative Learning:

Participative discussion based learning experience is given to students through interactive and collaborative teaching. Thought provoking activities like Class seminars and Group discussions enhance critical thinking and expression. Collaborative experience is provided through visits to other institutions and industries.

Holistic participative learning is aided by participation in extracurricular activities like sports and cultural programs. The student council and various departmental societies organize events.

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Outreach activities are participative and contribute to holistic education, and develop human values, ethics and leadership qualities. These activities are organized by various departments as extension activities. Activities by the NSS, NCC and YRC are camps in villages, schools and other places. Cultural Events organized during Youth festivals. Personality and soft skill development programs are conducted. Awareness programs are organized in schools adopted by various departments.

Problem Solving: Problem solving is a highly challenging method especially in the field of Science. The course outcomes reflect the use of this method. Research, analysis, interpretation and application are used to solve complex problems and find solutions. Mathematics is problem solving. Numerical questions are a part of Physics and Chemistry. Computer Science, IT and other departments also use the problem solving teaching methods. The evaluation format has kept a set percentage on testing problem solving skills. Dissertations at PG level involves the problem solving methodology.

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

ICT defines contemporary education and it is the future of knowledge. Its application for research and creative simulation shall shape the universe of the coming generations. The institution has experienced qualified faculty who move in sync with the times and make ample use of ICT in their teaching tool kit for updating knowledge, research, content development and dissemination of knowledge. Excellent research and study material is available online today. It extends the knowledge base of the subject and helps teachers keep abreast of the development and research in the field.

All PG classes are being taught using PPTs and online resources through NPTEL and SWAYAM.

ICT leads to improved student learning, enhancing presentation skills and improving capabilities for innovation. Integrating technology to education has had a significant positive impact on student achievement.

Experiential Classroom learning through ICT is a boon for students as they listen to the teacher and at the same time receive audio- visual information through power point images. The engaging participatory activity makes learning interactive. Computers reduce time spent on mechanical tasks such as writing, rewriting and producing graphs and other diagrams.

Internet based learning can be carried out using just smart phones. The Internet facilitates quick access to comprehensive information on any area. Internet tools like emails and social networking sites help develop better connection between student and faculty. The institution's faculty share notes, assignments and tutorials through internet.

The examination cell has been completely automated. The evaluation process has been completely revamped in the college with increased use of ICT. PG students give power point presentation in their continuous internal assessment seminars, project presentation and viva voce. Research scholars make

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abundant use of Internet and ICT.

Students of Computer Science and IT departments are preparing computer based projects and Apps.PG students of Physics are performing software based material modeling experiments. Life science students visualize biological and molecular phenomena in 3D through computers.

The college Library has been automated for upgrading learning experience. RFID system is being used in the library management. Usage of ICT enables efficient library management, provides wider exposure to world wide databases of books and journals and also gives facilities like e-access to online resources like Shodhganga, Shodhsindhu, N- List, World Library and others. Soul 2.0 software is being used as Integrated Library Management System.

File Description	Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response: 35:1

2.3.3.1 Number of mentors

Response: 72

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll	View Document
Circulars pertaining to assigning mentors to mentees	<u>View Document</u>
Any additional information	<u>View Document</u>
Link for additional information	View Document

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Response:

The Academic Calendar for the state is prepared by the Department of Higher Education. It comprises of schedule for admission; course completion; dates for unit test, quarterly, half yearly and Annual practical and theory exams for UG and Semester examinations for PG; tentative dates for Sports and Cultural

activities; and the total number of working days and holidays.

The Autonomous Cell of the college proposes its schedule based on the state government's academic calendar.

The Admission Committee takes care of the whole admission process. The individual departments prepare teaching schedules; formation of board of studies; and departmental research committees. The college forms various other committees to take care of curricular and co curricular activities throughout the year.

The Time Table Committee of the college prepares the general time table for undergraduate classes, where as time table for PG classes is prepared by the concerned departments. Workload is distributed to the individual faculty members according to UGC norms. Guest faculty is appointed against vacant sanctioned posts every year as per the directives of the department of the Higher Education. This helps in completion of syllabus and even distribution of the work load for smooth functioning.

Daily Diaries are maintained by Faculty members to keep a record of daily classes and practical according to the teaching plan proposed by them. At the end of the every month the teaching diaries are checked and duly signed by the Head of the Department and the Principal. The information regarding syllabus completion is sent periodically to the Higher Education Department.

Academic Audit of each department is done annually by the IQAC. Evaluative reports on the performance of each department are prepared based on formats developed by IQAC. They include facts and figures and documentation of each academic process.

Annual Feedback mechanism is in place. The feedback committee has developed a Mentor- Mentee scheme through which students give their feedback and share their concerns. Feed back is also collected from alumni, parents and subject experts on issues including syllabus updating, adherence to examinations calendar, result declaration and others.

These mechanisms help the institute in preparation and adherence to academic calendar and teaching plan.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document

Teacher Profile and Quality

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

Response: 71.13

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File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document
Link for Additional Information	View Document

$2.4.2 \ Average \ percentage \ of full \ time \ teachers \ with \ Ph.\ D.\ /\ D.M.\ /\ M.Ch.\ /\ D.N.B \ Superspeciality\ /\ D.Sc.\ /\ D.Litt.\ during \ the \ last \ five \ years \ (consider \ only \ highest \ degree \ for \ count)$

Response: 92.57

2.4.2.1 Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit.* year wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

Remark – List of Teacher's attached but Certificates of Ph.D. Demanded. Due to heavy file of Ph.D. Certificate's could not be uploaded and the actual number is differ form above.

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	<u>View Document</u>

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 0.28

2.4.3.1 Total experience of full-time teachers

Response: 1181

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

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Evaluation Process and Reforms

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

Response: 53.6

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

2018-19	2017-18	2016-17	2015-16	2014-15
51	54	53	54	56

File Description	Document
Institutional data in prescribed format (Data Template)	<u>View Document</u>
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

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

Response: 0.05

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

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	1	1	1

File Description	Document	
Number of complaints and total number of students appeared year wise	View Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

2.5.3 IT integration and reforms in the examination procedures and processes including Continuous

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Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

Response:

The Academic Calendar for the state is prepared by the Department of Higher Education. It comprises of schedule for admission; course completion; dates for unit test, quarterly, half yearly and Annual practical and theory exams for UG and Semester examinations for PG; tentative dates for Sports and Cultural activities; and the total number of working days and holidays.

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Academic Audit of each department is done annually by the IQAC. Evaluative reports on the performance of each department are prepared based on formats developed by IQAC. They include facts and figures and documentation of each academic process.

Annual Feedback mechanism is in place. The feedback committee has developed a Mentor- Mentee scheme through which students give their feedback and share their concerns. Feed back is also collected from alumni, parents and subject experts on issues including syllabus updating, adherence to examinations calendar, result declaration and others.

These mechanisms help the institute in preparation and adherence to academic calendar and teaching plan.

Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

The PO and CO of all programs and courses have been displayed on the college website. The teachers communicate the outcomes in the class. In general the Outcome of various courses being taught in the college can be compiled as follows:

Academic and professional outcomes:

- Knowledge of subject: in depth knowledge of theoretical and practical aspects
- Application : application of fundamental knowledge to solve problems
- Inter and multi discipline knowledge: cross discipline interactions
- Problem Solving: through reasoning skills
- Critical thinking: leading to research
- Logical and Analytical abilities for research and interpretation
- Employability quotient increased: to enable job finding
- Training: vocational and hands on experience
- Industry preparedness: through exposure and
- Physics, Mathematics: solutions to problems
- Biology group: Botany and Zoology lead students to agro based industries
- Health and related industry: Biochemistry, Microbiology and others
- Career Guidance: for professional, corporate and government jobs
- Higher education: leads on to NET and teaching jobs
- Entrepreneurship training for start ups

Personal development and Social Outcomes:

- Communication Skills: effective expression
- Information Technology and Soft Skills
- Life Skills: holistic growth
- Team building: cooperation and leadership
- Citizenship: awareness of responsibilities
- Awareness: Ethics, Honesty, Justice,
- Environment consciousness: global and local responsibility
- Compassion and social service

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

Describe the method of measuring attainment of POs , PSOs and COs in not more than 500 words and the level of attaiment of POs , PSOs and COs.

A mechanism developed for attainment of Pos and Cos

An effective mechanism has been developed for evaluation of the attainment of the Pos and Cos:

- 1. Induction Program is organized by the IQAC for the new entrants, where they are informed about the career opportunities after the completion of each program. They are acquainted with the various programs and courses, and the Cos and Pos.
- 2. Evaluation through examination system: The Annual and semester examinations test the attainment of outcomes. The college has regular unit tests, quarterly and six monthly exams for continuous and comprehensive assessment to attain CO and PO. Compulsory seminars and power point presentations by PG students helps assessment. Lab Courses and Project Work, field work, study tours, industry visits, industry based projects are a few major steps, adopted by the institution as a healthy practice to attain the COs and Pos. The teachers review the academic performances of the students through laboratory practical examination, class seminars and previous results. Exams help to assess the PO and CO.
- 3. Autonomous Examination Cell: the cell takes the responsibility of assessment. The Principal assisted by a group of faculty members monitor the transparency in the process of evaluation and time-bound implementation of the syllabi.
- 4. Every department organizes Board of Studies meetings, Seminars, talks from faculty members and alumni in cognizance of the latest technology demand, job prospects and social requirements. The Academic Council primarily deals with the approval of new courses, updating old courses and other academic reforms, where the reforms are discussed with external subject experts and are implemented after approval. This whole process evaluates the Pos, PSOs and Cos carefully and helps in their effective implementation.
- 5.COs like Global competencies e.g. communication skills, computer literacy, team spirit, social commitment, values and ethics are attained through various Co curricular activities, NCC, YRC and NSS activities, Career Counseling, Personality Development Programs, and various collegiate and inter- college competitions. In addition to this the students are promoted to foster their creativity in Literature through the college magazine. The sportive skills and sportsman spirit are inculcated among the students through sports competitions organized at the huge college playground, by the sports department.

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 93.9

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

Response: 799

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

Response: 866

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File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Any additional information	View Document
Link for the annual report	View Document
Link for additional information	View Document

Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process		
Response: 3.02		
File Description	Document	
Upload database of all currently enrolled students	View Document	

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Criterion 3 - Research, Innovations and Extension

Promotion of Research and Facilities

The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

RESEARCH POLICY OF THE COLLEGE

College has its own Policy to promote Research activities. The code and conduct of Research policy has been adopted from Ordinance 45 of the Pt. Ravishankar Shukla University which awards Ph.D. degrees to Research scholars. The research policy maintains ethical standards in Scientific Research for better results and prevents misconduct like plagiarism. Research is conducted in the college by following the rules laid in policy.

- 1.Research work for the award of PhD degree is conducted in the seven Pt Ravishankar Shukla University authorized research centres: Botany, Chemistry, Defense Studies, Geology, Mathematics, Physics and Zoology.
- 2. Faculty members who are registered as guide in the University are permitted to act as Supervisor/Co-supervisor for guiding research for the award of PhD degree.
- 3. Selection of Research scholars is made on the basis of the entrance examination conducted by Pt. Ravishankar Shukla University. Selected students opt for research centres. At the Research centre, Supervisors are allotted as per the vacancy under the registered supervisor, according to the policy of the government. College follows UGC guidelines of 2009 and UGC 2016 and Ordinance 45 of University (as approved by Co-ordination Committee on 19. 04.2017) as the principal document for research.
- 4. The College provides all the facilities to its Faculty members and Research scholars for conducting research.
- 5. Esearch committee promotes Collaborative research, Projects, fellowship, High impact research, organizing Seminars and Conferences to promote research activities.
- 6.Departmental Research Committee (DRC): DRC consists of the Principal of the college as Chairman and registered supervisors as members. There should be at least 3 members including Chairman. If the number of supervisors is less than 2 then the Vice Chancellor nominates a member.

Functions of DRC:

- 1. Selection and admission of Ph.D. students
- 2. Allocation of Research Supervisors for students enrolled for the Ph.D. programme depending upon the vacancy, the number of students per faculty member permitted by the university, the available specializations among the faculty supervisors, and the research interest of the student as indicated during the interview of the student.
- 3. Assessment of redundancy of research proposals

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- 4. Evaluation of research progress every six month
- 5. Approval of the synopsis of PhD thesis
- 6. Pre Ph.D. presentation is evaluated by DRC.

After successful completion of course work, the Synopsis of PhD is forwarded to University for approval in the RDC (Research Degree Committee) for formal Registration.

Plagiarism Check: Manuscript submitted to the cell is checked in Urkund software. Before submission of Ph.D. thesis, it is mandatory to check Plagiarism. Thereafter it is sent to the University Plagiarism Cell for the certification.

IQAC cell - IQAC cell of the college also monitors the quality of research, through academic audit.

Details of research guidelines are given in Ordinance 45 of Pt. Ravishankar Shukla University, Raipur and can be seen on the college website.

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	
Any additional information	<u>View Document</u>
URL of Policy document on promotion of research uploaded on website	View Document

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

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
List of teachers receiving grant and details of grant received	View Document
Any additional information	<u>View Document</u>

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

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
List of teachers and their international fellowship details	View Document

Resource Mobilization for Research

3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 1980200

3.2.1.1 Total Grants from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
2.13	0.45	5.33	9.45	2.44

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

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3.2.2 Percentage of teachers having research projects during the last five years

Response: 2.74

3.2.2.1 Number of teachers having research projects during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
01	01	04	05	02

File Description	Document
Names of teachers having research projects	<u>View Document</u>

3.2.3 Percentage of teachers recognised as research guides

Response: 33.33

3.2.3.1 Number of teachers recognized as research guides

Response: 24

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document

3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Response: 10

3.2.4.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	1	4	<u>5</u>	2

3.2.4.2 Number of departments offering academic programes

2018-19	2017-18	2016-17	2015-16	2014-15
14	14	14	14	14

File Description	Document
Supporting document from Funding Agency	<u>View Document</u>
List of research projects and funding details	<u>View Document</u>
Paste link to funding agency website	View Document

Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

Response:

The institution's **Quality Circle** has been instrumental in developing an ecosystem for quality education through networking, sharing and discussing new ideas. The college is a lead college and the Quality Circle guides other colleges too.

Research centres in 7 departments have developed ecosystems for innovative research. Each centre has experienced research guides, scholars, good laboratories, lab funds, ICT facilities and departmental libraries. The number of Guides, PhD's awarded, and publication detail are listed.

The museums in Geology, Zoology, Botany and Defence Studies; and the botanical garden are conducive to research. Guest lectures, field trips and industry visits assist research. Boards of Studies and IQAC have industry representatives.

An important point to be noted here is that qualitative research work is being carried out in the English and Hindi departments even though the college is a science college.

Entrepreneurship

The institution aims to increase employability; and entrepreneurship is attractive to the students of this region. The college tries to enhance global competencies, knowledge base, skills and inspire entrepreneurship.

The IQAC has taken up this responsibility with sincerity and robust commitment. An FDP to train faculty members of the colleges of the region in entrepreneurship was organized. An Entrepreneurship Awareness Camp was organized to raise awareness among students. An MOU has been signed with CITCON, a

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government consultancy and funding agency that encourages entrepreneurship in the region.

Vocational Training programs have been conducted by different departments in their subject areas to equip students with the knowhow to run small businesses in the city or in their native villages. The majority of students are from rural tribal regions with strong bonds to their lands. Students are being prepared in mushroom cultivation; instrument making; preparing manure and many other industry and agriculture initiated projects.

An Incubation Centre is in the pipeline. It is the top priority in the plans for the future.

Community Orientation

The college is linked with the Unnat Bharat Abhiyaan under which different departments have adopted villages and conducted camps to raise awareness on health, sanitation, education, self employment, women empowerment and environment issues. SVEEP was organized to talk about elections and responsibility of citizens. Many programs on Swachhata Abhiyaan organized. Beti Bachao and Beti Padhao drives empower girls. Sickle cell screening and counselling camps were organized at Tendua and Jambgaon. Mushroom cultivation training program was organized at village Tendua. A Social Evils awareness program was organized in Jambgaon.

Departments adopt schools to motivate school children. Mathematics department has adopted Govt. HS Schols at Heerapur, Gogaon and Changorabhata. The Chemistry department carried out awareness camps at Mintu Public school and Govt. JN Pandey HS School. The Physics department has adopted Govt. HS School, Jambgaon, Govt. HS Shool, Pt RS University and at the Kopalwani Deaf and Dumb school, run by an NGO.

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

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Response: 16

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year-wise during the last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
04	03	02	04	03

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

Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: B. 2 of the above

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

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years

Response: 1.08

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

Response: 26

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

Response: 24

File Description	Document
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc	View Document

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

Response: 3.36

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

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

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Response: 1.03

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

2018-19	2017-18	2016-17	2015-16	2014-15
17	16	3	3	21

File Description	Document
List books and chapters in edited volumes / books published	<u>View Document</u>
Any additional information	<u>View Document</u>

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

Response: 2.43

File Description	Document
Bibliometrics of the publications during the last five years	View Document

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

Response: 5

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document

Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 0

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

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

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Response: 0

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
List of facilities and staff available for undertaking consultancy	View Document

Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community,-sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

The institution has an age old ethos of serving the society and is highly committed to nurturing good, sensitive, focused citizens, who have a deep sense of responsibility towards the self and the society.

The chief impact of the extension activities in sensitizing students towards gender and other social issues

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can be seen in the peaceful, safe, secure, secular, liberal and democratic ambience of the college and the healthy relationships between boys and girls in the college. There are hardly any issues and complaints in the Complaint and Suggestion Boxes, Anti Ragging Cell, Discipline Cell, and Women Harassment Cell, or need for police interventions.

The extension activities again contribute to the holistic development of the majority. The impact is evidenced in the overall good academic result of the college; no major health hazards as the campus, the hostels, the canteen, the washrooms are neat and clean; peace loving, disciplined students; no unethical practices.

Institution – Community Extension activities are organized through the three wings of NCC, NSS, Red Cross, and departmental societies. In the past five years:

1.**Health awareness programs** – Programs on Yoga, AIDS, health, cleanliness, hand wash, and the Swatcch Bharat Abhiyan.

A Sickle cell screening and awareness program in village Tendua.

Eye and Dental checkup camps, lectures on seasonal diseases, and quiz on health issues organized.

Distribution of antihelminth medicine on Rastriya Krimi Mukta Divas with help from the Lion's Club.

1. Environment awareness programs –

The institute in collaboration with the Municipal Corporation, Raipur launched a campaign recently on the ban of single use plastic.

Ozone Day, International Earth Day celebrated. Campaigns on Campus cleaning, awareness of fuel consumption, wild life conservation, rain water harvesting, Groundwater Exploration and plantation under Van Mahotsav have been carried out.

1. Value Education programs –

On the occasion of 150th birth anniversary of Mahatma Gandhi, a series of programs based on Gandhian philosophy were organized in 2018-20.

National Youth Day is celebrated every year dedicated to Swami Vivekanand. Days of National importance are celebrated annually to inculcate values on national integration.

- 1. **Quality awareness programs** The IQAC organized state level seminars on strategies in quality education and research, in other HEIs of the state.
- 2. Institutional social responsibility programs –

Village Tendua has been adopted by the institution under Unnat Bharat Abhiyan.

SVEEP programs on awareness of the electoral process were organized.

NSS Blood donation drives, Traffic control programs by NCC cadets, and an Awareness Program on

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Human Trafficking were organized.

6. As part of curriculum- extension interface, the following programs were organized:

Digital awareness program - One day workshop on Digital lockers; training on computer education for post graduate students; and digital photography workshop for faculty and students.

Student support programs - Mock test of NET-CSIR for PG students; Personality development and communication skills program; writing-speaking skills competitions; vocational - educational training and lectures.

College students are impressionable young adults. Critical thinking, societal norms of behavior, service and ethical social values are ingrained in students through these activities.

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5	View Document
year	

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

Response: 133

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

2018-19	2017-18	2016-17	2015-16	2014-15
27	43	28	14	21

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 38.42

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
1200	1241	1280	530	623

File Description	Document
Reports of the event	<u>View Document</u>
Average percentage of students participating in extension activities with Govt or NGO etc	<u>View Document</u>

Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Response: 21.8

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on —the-job training/ project work

2018-19	2017-18	2016-17	2015-16	2014-15
17	14	20	15	43

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

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

Response: 10

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
5	0	0	0	5

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

Criterion 4 - Infrastructure and Learning Resources

Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Response:

College has the following physical facilities and keeps upgrading its infrastructure day by day as per the demand through the State Govt, UGC, Janbhagidari and other funding agencies for assistance.

Existing number of class rooms are 35.In the year 2017, 3 class Rooms (Room no. F-40, F-41, F-42) and in 2018, 5 class Rooms (Room No. F-43, F-44, F-45, F-46, F-47) in the first floor have been constructed by RUSA Grant.

Total number of rooms available in the college are 110 (Including Administrative Section, Class Rooms, Seminar Hall, Laboratories, Main Library, Post graduate Library, Examination Cell, Common Room for girls etc.)

Laboratories-23

Computer Labs- 03 (01 IT, 01 CS & 01 Mathematics)

UG Laboratories - 08 (Botany-01, Zoology-01, Chemistry-02, Physics-03, Biochemistry-01,)

PG Laboratories-09 (Botany-02, Zoology-02, Chemistry-02, Physics-02, Biochemistry-01)

Common Lab for UG & PG – 03 (Biotechnology-01, Microbiology-01, Geology-01)

Hostels-06

Boys Hostels -03 (Shastri Hostel, Major Gore, Uma Das Mukharji Hostel) each of capacity 50

Girls Hostels -03

- 01 (capacity of 18 girls.)
- 01 (Two staff quarters have been converted to hostel which accommodate 12 girls)
- 01(New girls hostel having 100 seats have been constructed)

Principal Residence- 01

Warden Residence – 04

Doctor Residence - 01

Gardens- 05 (Including one Botanical garden with rare and medicinal plants along with a green house)

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Canteen- 01

Staff Room- 14, each department has its own staffroom.

Auditorium- 01, college has a well built Air Conditioned auditorium with 500 seating capacity for audience, including balcony and two green rooms.

Girls Common Room- 01, available in ground floor with all aminities.

Museums – 04 (Zoology – 01, Defence -01, Geology- 01, Botany - 01)

Staff Quarters-78

Post office- 01, Located in college campus

Primary Health Centre- 01 (Regular Doctor is posted)

Guest House- 01 (Situated in College premises having all facilities)

Open Stage- 01

Suggestion/ Complain Box- 01

Autonomous Exam Cell- 02 Rooms and 01 strong room

Examination Control Room - **01**(Room No. - G40), from this control room college examination and all other competitive examinations are conducted.

Placement Cell- 01(Room No. – F37)

NSS Unit- 01 (Dr. A. K. Adil, is the Prof. In- charge).

NCC Unit- 03 (Infantry; In-charge officer Prof Ravi Banjare, Signal: In-charge officer Prof M. S. Gupta & Air wing: In-charge officer Prof. R.A. Siddiqui)

Washrooms – **15** (Separate washrooms for boys, girls & Faculty Members).

Additional Features -

Separate room for NCC and NSS.

Total 11 Water Purifiers in each department/ office with 07 water cooler on each floor

Own water supply system with 06 bore wells and one hand pumps.

Total 14 Photocopier; Apart from the office and Library most of the departments are having photocopiers.

College has public announcement system connected to all the class rooms.

Solar Energy system of capacity 10 KWh is installed which covers the Principal Chamber, Office & Mathematics Department.

Two Wheel chairs for physically challenged students

Ramp for physically challenged person.

35 CCTV Cameras at different points covers the whole campus.

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

Response:

SPORTS Facilities: The college provides opportunity to the students for sports activities. The students participated in sector level, inter collegiate, state level, inter university and National level tournaments. A number of Indoor & Outdoor games facilities available at college

Specification about area/size, year of establishment and user rate

Field	Facilities	Area/Size	Year of es	stUser	Rate	(No	of
			ablishmen	tstuden	ts	using	the
				faciliti	es per	year)	
Sports			,				
Basketball	College Court	30 to 20 mtr.	1988	30 to 50	0 Stud	ents	
Hand ball	College Court	45 to 25 mtr	`1988	30 to 50	0 Stud	ents	
Chess	Sports room F 25 and chess board	3 or 4 Table	1966	50 to 60	0 Stud	ents	
Table Tennis	T.T. Hall F 25 and ball and bat	30 to 30 Ft.	1990	100 Stu	idents		
Tennis	Court, net, bat and ball	30 to 15 mtr	1960	10 to 20	0 Stud	ents	
Kabadi	Ground and sports kit 13-10	13 to 10 mtr	1995	40 to 50	0 Stud	ents	İ
Kho -kho	Sports kit	29to 26 mtr	1995	40 to 50	0 Stud	ents	
Volley Ball	College Hostel Ground	29m x 10m	2000	30 to 40	0 Stuc	lents	
	Net & Ball by college						
Foot Ball	Pt. R.S.U. Play ground	110 X 64 Mtr.	2009	30 to 40	0 Stuc	lents	
	Gloves ,Ball given by college						
Hockey	Sports & youth welfaRe deptt Ground	.91.40mX 55 Mtr		15 to 20	0 Stud	ents	
	SpORTS & equipments given by college						
Lawn Tennis	College	78 ft by 36ft		02 to 04	4 Stud	ents	

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		(23.77mtr by 10.97mtr			
Gymnasium	Hostel 3, Gimming equipments	15m x20m		1. udents	
	ty Availed from Other Institutes	101111120111		11 0001113	
Archery	Indoor Stadium (in collaboration with Youth welfare department)	30 m	2010	03 to 05 Students	
Squash	Indoor Students (in Indoor Stadium collaboration with Nagan Nigam Balbir Juneja Satdium)	15m x 12m	2014	05 to 10 Students	
Athletics	Sports instruments by college Synthetic Track & Sinder track of Pt.RSU sports Deptt.	200, 400, Mtr. Traek	.1990	20 to 30 Students	
Cricket	Sports instruments by college Pt.R.S.U. Play ground Cricket by college	2100 X 110 Mtr	1988	30 to 40 Students	
Softball	Sports & youth welfase deptt Ground is used Sprots	.60.96c.m X18.29m		05 to 10 Students	
Swimming	International Swimming pool	50 to 25		03 to 05 Students	
Weight Liftin	gVarious Gyms /Rings in city Cotune by college	16 m2		10 to 15 Students	
Wrestling	Various Gyms /Rings in city	7 Mtr, 1Mtr		05 to 10 Students	

Cultural activities- The College has a cultural committee, which encourages and provides platform to students to show their talents in cultural, literary, fine arts activities. Students participate in the university youth festival and inter college competitions in the following fields -

Field	Facility	Area / Size	Year establishmen	of User Rate nt	
Performing arts	Indoor stadium	25 x feet	801948	7500 students aroun programmes per Drama, Dance , Si Recitation	nd 1 yea singin
Street play Students	yopen air theatre	25 x 90 feet	1948	2500 students	
Literary competition	Class rooms	20 x 50 feet	1948	150 Debates, Quiz, W Skills, Extempore Sp Slogan Writing	Vritin peech

File Description	Document	
Geotagged pictures	View Document	

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 55.56

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 08

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	<u>View Document</u>
Paste link for additional information	View Document

4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Response: 69.44

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
85.29	259.59	91.37	149.45	129.36

File Description	Document
Upload Details of Expenditure, excluding salary during the last five years	View Document
Upload audited utilization statements	View Document

Library as a Learning Resource

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

Response:

The college has a central library in the main building and Eleven P.G libraries are located in respective depa of the library is 4462.85 sq. ft. area. The central library is well structured and with a separate spacious reading capacity of 58 for information seekers.

The College has fully automated central library and the details of which are as follows:

Year	of Name of the IL	MSNature of Automation	Version	
Automatio				
2009	SOUL (Library Management Software and house software)	rarycreating database of its holdings In-Student transaction	SOUL- 2.0	ha co wi Gł
	,	(Under Graduation only)		lin
		Periodically list of books and reminders ar generated,	e	
		Acquisition of serial, maintaining issue records	2	
		sending reminders of missing issues, generating binding lists		
2015		Bar-coding of documents	SOUL- 2.0	
		bar-coded library membership cards		
		Student transaction		
		(Under Graduation and Post Grad both)		
2010	E – library	Browser-based access,Facility of fetching of	of SOUL-2	
		bibliographical data, Improved user-friendly OPA	0	ry
		interface, Easing out Import/export of data; Quic		
		report generation in different formats etc	Software with	
			clients attached to	1t.
		rvall aguinned digital library with 10 nodes is		
		well equipped digital library with 10 nodes is housed in the central library		
2010	Repository	Publications of staff, Thesis, rare books, questio	n	
		papers are digitalized		
2010		E-learning service, E-Alert service, Domain	-'SOUL-2	

		Specific User Orientation, Document Delivery Request, Service on Request, Multimedia Service, E-		ry	
		Reference Desk, Photocopying/Scanning/Printing	Software with	11	
		Service, Virtual Reference Library	clients attached to	it.	
	facility for students	The library facilitates learning for visual impairment			
	with special needs	students through audio e-database			
2014					
`2010	Plagiarism Check	Urkund, web based Anti-plagiarism software under Shodhganga project is available for plagiarism check of thesis, research articles, publications and other documents.			
2010		provides search optimization of the library resources to its users	OPAC/Web OPA		

Data Requirement for last five years: Provide a description of library with

- Name of the ILMS software
- Nature of automation (fully or partially)
- Version
- Year of automation

File Description	Document
Upload any additional information	<u>View Document</u>
Paste Link for additional information	View Document

4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

Response: A. Any 4 or more of the above

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File Description	Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga Membership etc	View Document

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 441080.6

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
1.59	7.44	5.90	1.52	6.60

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year

Response: 3.54

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

Response: 155

File Description	Document
Details of library usage by teachers and students	<u>View Document</u>

IT Infrastructure

Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updatingits IT facilities

Response:

1.IT Facilities:

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- 1. Computer facility is available in some departments with LAN and internet connection. LCD available in all PG departments
- 2. Computer labs in IT 32 computers.
- 3. Computer Science department 37 computers.
- 4. Mathematics computer lab 15 computers
- 5. Physics Computer Lab 10 computers
- 6. English Language Lab 9 computers
- 7. Career Counseling cell 5 computers
- 8. Office 10 computers and Printers with LAN
- 9.E- library has 11 computers connected through LAN
- 10. Website is updated and maintained by a committee.
- 11.SMS alert facility for students and staff facilitates proper functioning.
- 12. Examination forms are filled through an online process.
- 13. Result processing software is used by the Autonomous Examination Cell.

1.**Wi- Fi:**

The college has adequate Wi-Fi facility. The office is connected to the leased line of BSNL connected to 10 users, with a data speed of 10 Mbps . The campus is wi-fi with the LEASED Line of JIO network with the speed of 20 MBPS and 32Mb for personal users. Library is also connected with the BSNL leased line, download data speed is 10 Mbps for e-library and connectivity with 11 users. Individual departments use wi fi receivers and mobile hot spots for access.

Maintenance of ICT infrastructure: The ICT infrastructure is maintained mainly through the service providers. BSNL and JIO service providers send their engineers in case of any problem related to wi –fi. The hardware is maintained through contingencies and student funds, with the help of service facilities provided by the dealers of specific brands. Updation of computers and internet facilities are maintained by each department.

Website/ Software	Details
Online Software -	To Upload information regarding femployees to election commission
Polling Personal Setup (PPES)	
Election software	
Website -	To pay salary ,Pension ,GPF etc .
Pension Aabhar	
(ekoshonline.cg.nic.in)	
SKY Mobile	To distribute, smart phone to students under sanchar kranti scheme.
Website -	All India survey participation
AISHE Code C-21828	

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Unnat Bharat Abhiyan		
(http://unnatbharatabhiyan.gov.in)		
Website -	To Upload college data on National Higher Education Resource C	ntre
	Management Information System	
NHERC MIS PORTAL		
AISHE Code C-21828		
SCIENCE College Raipur		
(http://nhercmis.tiss.edu)		
Scholarship Portal	To distribute post metric scholarship to students	
Science College Raipur		
(http://mpsc.mp.nic.in)		
Website -	To conduct University B.Ed /B.A exam & Generate admit	Card
PRSU Admit Card/Attendance list	Attendance list for the same	
Download (B.Ed./BA)		
Bowmoud (B.Da., Bri)		
Science College Raipur		
(http://www.prsuuniv.in)	11: 2010 20	
Website -	Admission 2019-20	
PRSU Science College Raipur		
(http://www.prsuuniv.in)		
Website -	College website to upload Notices /Information & events	
Science College Website (Upload Notice)		
(https://www.gcsrcg.org)		
Online Software -	To conduct annual /Semester exam. From 2019.	
College Management System		
Science College Website Website -	All India Survey of Higher Education data upload	
website -	All fildia Survey of frigher Education data upload	
AISHE Portal Science College		
(aishe.nic.in)		
Website -	To publish tenders on directorate of public relation website	
Directorate of Public Relation		

(cg.nic.in)			
Website –	MIS Software	MIS Software Student Management	
sheet built on asp.net C# data MS-SQL Sarver	abase / Online exam	form, admit card, attendant,	
File Description		Document	
Upload any additional informa	tion	View Document	

4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Response: 22:1

File Description	Document
Student - computer ratio	<u>View Document</u>

4.3.3 Bandwidth of internet connection in the Institution.

Response: 20 MBPS - 35 MBPS

File Description	Document
Details of available bandwidth of internet connection in the Institution	View Document

Institution has the following Facilities for e-content development

- 1. Media centre
- 2. Audio visual centre
- **3.Lecture Capturing System(LCS)**
- 4. Mixing equipments and softwares for editing

Response: B. None of the above

File Description	Document	
Upload Additional information	<u>View Document</u>	
Institutional data in prescribed format	<u>View Document</u>	
Link for Additional information	View Document	

Maintenance of Campus Infrastructure

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

Response: 29.82

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

2018-19	2017-18	2016-17	2015-16	2014-15
38.72	58.12	58.65	52.94	46.46

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts	View Document

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

Response:

The college has a system for the procurement ,utilization and maintenance procedure for managing physical, academic and support facilities:

Procurement:

- Procurement policies are framed in accordance with the Store Purchase Rules of Govt. of Chhattisgarh to ensure economy, quality and transparency regarding competitive prices.
- Requisitions are invited by the Principal from all the heads of departments for laboratory, library and sports goods.
- A purchase committee of senior professors is constituted by the Principal.
- Tenders are invited form suppliers/ dealers.
- The purchase committee goes through the tenders and finalises the best quotation.
- Purchased items are entered in the stock registers.

Maintenance and utilization:

- Maintenance of the campus and the infrastructure of the college including the college building, class rooms, laboratories, hostels, staff quarters, dispensary, post office, auditorium and gardens are done by the PWD.
- The building committee looks after the maintenance work.

Laboratory:

- Well equipped Laboratories are utilized for practical papers.
- The college has laboratory maintenance funds for all departments.
- Lab technicians, lab attendants and class IV employees maintain equipment and cleanliness.
- Lab materials are purchased from UGC, Janbhagidari Samiti and the lab funds.
- Safety measures are mandatorily maintained.

Class rooms:

- A sufficient number of class rooms are available for students.
- The time table committee ensures the availability of class rooms for teaching and extracurricular activities.
- Classrooms are also utilized by external agencies like VYAPAM, PSC, UPSC.
- Cleanliness is maintained.
- Dustless chalk sticks are used to keep the environment of the class room dust free.
- 20 Class rooms are equipped with ICT facilities (LCD projector, wi-fi reciever)

Library:

- The rich library has about 5000 books.
- The library is fully automated, equipped with the software 'SOUL-2 Integrated Library Management Software with 11 clients attached to it and N-LIST.
- Physical and digital access is provided in the library.
- Books for UG students are issued in the main library and PG students have departmental libraries.
- A number of journals and magazine are also available.
- Students return the books before the examinations and get an NOC.
- A spacious reading room is available for students.
- Verification and maintenance of books is done every year.

Computers:

- All the departments, including the office and autonomous cell have been digitalised
- Computers available for faculty and research scholars.
- Computer Science and IT departments have computer labs.
- The Computer Science department runs BCA, PGDCA, DCA courses. Information technology is taught at both the UG and PG levels by the IT department. Computer programming based lab courses are part of the curriculum at PG level in Physics. Purchase, utilization and maintenance, up gradation are followed regularly.
- IT and Computer Science departments are run under Self Financing Schemes running on fees.
- Computer maintenance is done by proper Service Centres.
- Buy- Back Options are used in order to manage e-waste. College provides facilities for volley ball, basket ball, table tennis, cricket, netball game etc.
- Play grounds are used round the year for practice
- Sports items are issued to teams or individual.

- Sports items are purchased an per the need and requisites provided by the sports officer.
- Fund is available as sports fee collected from each student at the time of admission .
- Maintenance of play ground and infrastructure is done by PWD.

HOSTELS:

- College has five hostels: three boys hostels and two girls hostel.
- Mess facility in available in hostels.
- Maintenance of major infrastructure is done by PWD.
- Other maintenance work such as purchase of items of cleanliness sanitary use, kitchen utensils, cutlery as well as repairing of fan ,tap etc are done by hostel fund collected from students at the time of admission.
- Warden of each hostel takes care of discipline, maintenance and other processes.

CANTEEN:

- Canteen facility is available in college, utilized by the students and staff.
- Infrastructure to run the canteen, is provided by college
- Contract of canteen is given by inviting tenders.
- A canteen committee is constituted by the principal to ensure the quality of food and maintenance of cleanliness in canteen.

CYCLE STAND:

- College has ample space for parking of two wheelers of the students .
- There is separate space for parking of college staff's vehicles.
- Contract of student parking is given through invited tender.
- Cycle stand fee is collected from students to generate fund for contractor.
- A token is given to students for parked vehicle to ensure the safety of vehicle.

DISPENSARY AND POST OFFICE:

- College has separate building for dispensary and post office.
- A regular doctor is appointed by the government in dispensary as a staff of Science College.
- Students of hostels, college and staff avail the facilities of free medical consultancy.
- No fund is provided for medicines.
- A fully fledged post office is also running in the same building.
- Post master and other staff in appointed by the Central govt.
- Maintenance of post office is done by the govt.

CAMPUS:

- Although major maintenance work of college premises in done by PWD, students of NSS, NCC and staff members are also aware about cleanliness of campus.
- Students of NCC , NSS along with staff members actively and frequently participate in cleanliness mission of campus .

- The Botanical Garden of the college is well maintained by the Botany deptt. through part time
- The green corners developed by individual departments are maintained by maintained by them .
- The park developed as Shahid Smarak is being maintained by PWD as well.



Criterion 5 - Student Support and Progression

Student Support

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

Response: 46.15

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

2018-19	2017-18	2016-17	2015-16	2014-15
1220	1302	1276	1133	960

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Institutional data in prescribed format	<u>View Document</u>

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years

Response: 0.52

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

2018-19	2017-18	2016-17	2015-16	2014-15
12	10	10	10	10

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	<u>View Document</u>

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical

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fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

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

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations offered by the Institution during the last five years.

Response: 21.12

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

2018-19	2017-18	2016-17	2015-16	2014-15
133	972	862	80	599

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	<u>View Document</u>

- 5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

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Student Progression

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

Response: 2.52

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Self attested list of students placed	<u>View Document</u>
Details of student placement during the last five years	View Document

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

Response: 25.4

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 0

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 38.22

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
28	42	4	3	2

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

2018-19	2017-18	2016-17	2015-16	2014-15
70	62	20	10	6

File Description	Document
Upload supporting data for student/alumni	<u>View Document</u>
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document

Student Participation and Activities

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

Response: 67

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
0	5	1	0	0

File Description	Document
Number of awards/medals for outstanding performance in sports/ cultural activities at interuniversity / state / national / international level during the last five years	View Document
e-copies of award letters and certificates	View Document

5.3.2 Presence of an active Student Council & representation of students on academic &

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administrative bodies/committees of the institution

Response:

In every year college constitute student council. The member of student council actively participated in cocurricular and curricular activities of college, under the guidance of professor incharge. The aim and object of formation of student council of the college is to promote the all over development of student in academic, administrative and personal level.

The composition of student council is as follows:-

- 1. Cultural society
- 2. Social work society(Red cross, NSS,NCC)
- 3. Science club
- 4. Physical activities
- 5. Gender issue society
- 6. Knowledge society
- 7. Current affairs
- 8. Computer literacy society
- 9. Book reading society
- 10. Dramatics society
- 11. Departmental societies

Cultural society actively coordinated all the cultural activities and important functions of College during the session organized by college like annual cultural day, teachers day, jayanties of national figures, other activities. They help in maintaining discipline, conducting program during practice and annual day functions.

NSS activities are coordinated with large participation by students and under the guidance NSS in charge every year. NSS to inculcate awareness of social problems, and swachhata abhiyan in college premises as well in different villages and areas of cities by the students. NSS Ncc students actively involved in blood donation camp, sickle cell camp and health checkup camp organized by college.

Science club societies organized science day every year in 28 feb.

A annual Magazine - Manisha is published every year with the help of an Editorial Team comprising of student members and faculty advisors. It provides an opportunity to the students to express their flair for writing and creativity through articles, poetries.

Language Lab In view of the critical significance of language skills in globalized world, students organize this club through activities like debate, group discussions, book reading and review, poetry, quiz and creative writing.

Student members of the library committee will assist in the procurement of text books, journals and other learning material

Every year a student association was formed by every department, which play a vital role in departmental activities like organizing lectures, seminar, workshops and other activities of departments. Their is a

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professor incharge to guide the students in the smooth and effective functioning of the associations.

Student members of the library committee will assist in the procurement of text books, journals and other learning material

The Sports Committee shows leadership in organizing various college and intercollegiate, sports activities. It coordinates and promotes participation of students in college inter-college sports festivals; plans and organizes inter-college sports activities.

Student members of different societies help to propagate quality policies adopted by the institution among the student fraternity and also help in projecting the student view point while taking any quality policy decision.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for Additional Information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 21.4

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	2	2	3

File Description	Document
Report of the event	<u>View Document</u>
Number of sports and cultural events / competitions organised per year	View Document

Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

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Response:

Alumni network by itself is one of the best professional networking platforms that help in maintaining socio-cultural and educational harmony between society and institute to strengthen their relation. The Alumni association of our college was officially registered in the year 2009 with a purpose to form a bridge between the former students and the institute to keep them in touch with the present growth development and also the challenges before the institute.

The college is truly proud of its brilliant alumni who are currently positioned all over the globe and have distinguished themselves in all spheres. We have 168 Registered Alumni till date.

Institute organizes alumni meetings every year at collegiate level or departmental level to build a link between the alumni, faculty, staff and students of the Institute. During the meets alumni are informed about the progress happening in the Institute. This year college organized a huge get together of alumni from 1948 batch from the day of establishment of college till 2019. Over all 378 Alumni from all batches attended the programme. The Alumni Association honored The CM of our state and ex Principal secretary Padma Shree Dr A T Dabke, Ex VC Ayush University were some distinguished guests at the function. The Important thing is that they all are alumni of college.

Alumni members are providing financial support to the college continuously for scholarships, building of infrastructure like specialized labs, up gradation of botanical garden, lab equipments and books etc. Alumni have also gifted water-filter, water-cooler to hostels of college, Instruments for Gym in hostel, instruments for labs, Rare and reference books, and color printer to autonomous cell of college.

Alumni are playing an active role in carrier guidance and mentoring students in their areas of expertise. Alumni are a huge talent pool whose guidance can be beneficial to many students Some of the alumni, who are presently working in the significant positions, are invited for the Guest lectures, seminars, debates, workshops on present trends in technology. They guide the students on 'Interview Skills', cracking competitive examination. 5-6 carrier guidance programs have been organized through alumni every year.

College have an alumni committee and this organized meetings of alumni time to time. Alumni visits the Institute and give guidance for the financial improvements and contribute by offering some valuable items according to need of college like water-filter, instruments for practical, color printers, beds for hostel, refrigerators, teaching stands etc. Intellectual Contribution by some alumni like reference books donated to library and CD related to syllabus etc. Some of the alumni, who are presently working in the significant positions, are invited by their concerned Departments for the Guest lectures.

Our Alumni association is a major pillar of our college which plays an important role in the development of the campus of the college. Healthy relation between the staff and the alumni is the main course to attract them towards the institute.

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

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5.4.2 Alumni financial contribution during the last five years (in INR).		
Response: D. 2 Lakhs		
File Description Document		
Any additional information <u>View Document</u>		



Criterion 6 - Governance, Leadership and Management

Institutional Vision and Leadership

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

Response:

The vision of the institution isto be the coveted destination of excellence in quality education and research in science, develop humanism, multidimensional growth of students, and constructive contribution to the community in the state, in India and in the world.

Our mission is to be proactive in the preservation, creation, andimprovement in the application and dissemination of scientific knowledge by teaching, research and public service in a comprehensive range of disciplines.

The leadership attempts to pursue excellence and achieve the vision and mission through creating an ambient academic atmosphere. The governance ensures effective leadership:

Quality education- is ensured by adherence to the academic calendar and CIA. Transparency in the admission process, exam management, grievance redressal process assures quality control. The college offers a number of program options. The selection of a program of choice ensures academic curiosity, interest, good performance and hones research instincts. Theacademic process is monitored by the academic audit report prepared by IQAC.

Research in science is evidenced in the 7 research centres. Research in English and Hindi are also in progress. The newly established PG departments are also in process for registration as research centres.

Faculty development– Scientific development and changes in teaching - evaluation methods has never been as fast as it is in this ICT – AI Age. Faculty has to be updated. Support is in the form of Special Casual Leave to attend workshops etc. Flexibility is provided to pursue research work.

Mentoring students —A value system based on the tenets of humanism is reflected in the sensitive, intelligent, peace loving disciplined ethical students of the college. This is the hallmark of students leaving the portals of the college. Such future leaders are the dire necessity of the country, and the college grooms students to be leaders.

Preparing students for facing the competitive future is done by the Career placement cell. Contribution to national development by ensuring equity, social justice and inculcation of core values like teamwork, leadership, co-operation, and social commitment are ensured through extension activities of NCC, NSS, YRC and departmental committees.

Alumni participation—Distinguished alumni participate in the governance, and offer ample support in the form of donations, books, equipment, valuable ideas and time to help the college fulfil its vision and mission.

Grievance reprisal of class III and IV employees- Immediate solution to employee grievances are

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ensured by the committee. Class III and IV are important cogs in the wheel of administration. Consistent interaction is a tradition.

Perspective - New programs. Collaborative initiatives by the administration have resulted in a number of new MoU with industries, higher education institutes and NGOs.

Participative Management- Participative management is followed at all levels. All the affairs of the institution are guided by the head of the institute, the Principal, who is actively supported by inputs from Jan BhagidariSamiti, Academic Council, Board of Studies and IQAC. Decisions are taken through committees, meetings, discussions and debates. The teachers are thus actively involved in a liberal democratic decision making process.

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

6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Response:

The institution has various statutory bodies for development of policies, regulations, guidelines, and implementation. The institution practices decentralized and participative management in all its activities by involving faculties In-charge, Heads of departments, faculty members and staff at all levels.

The institution is administered and managed by the head of the institution, the Principal, through various committees. These committees function according to the rules and regulation of the state government guide lines. The decision of the committee is forwarded to the Principal for endorsement, execution and issue of orders.

Admission Committees are formed in every academic session by the Principal in consultation with the heads of departments. A decentralized and participative process is followed throughout as there is clear division in areas of work.

At the graduate level, separate committees are formed for B.Sc. (Biology group), BSc (Mathematics group), BCA, and Model College. A model college formed by the government is administered by the institution which is a lead institution of the region.

At the M.Sc. level, each discipline has its own separate departmental Committee for conducting admission.

Structure of the committees: Senior faculty members are coordinators and five/six faculty members and a few technical staff are members.

The Preliminary stage: Rules and regulations, eligibility criteria, subject combinations, reservation policy of government, scholarships, relaxation of fees, important documents to be attached, the process for admission, the important dates for admission are published on the web site.

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The Process:

Help desk at the main entrance helps and guide the incoming admission seekers.

Course wise admission centres are formed for collection of admission forms. In sessions2016-17 and 2018-19 the forms were invited online.

After the last date for submission of admission forms is over, the forms are scrutinized, attached documents verified and a list of eligible candidates on the basis of merit and reservation policy is prepared.

The lists of selected candidates are sent for approval to the Principal. After approval of the Principal, the lists are displayed on the institution's notice board. The first list for admission is declared, along with cut-offs and last date for paying fees.

After a brief interview of the candidate and guardian, proper verification of original documents, the committee signs and forwards the forms for the payment of fees. An Undertaking about following the rules of the college and not getting involved in ragging or any indiscipline is also collected, signed by both the candidate and parent.

The fee committee informs the admission committee about seats filled. Vacant seats are the filled by consecutive displays of the second and third lists and the same admission process. The few seats that remain vacant are filled on a date declared for open counselling.

Thelast date for completing the admission process is issued by the Govt. of Chhattisgarh. It is strictly adhered to.

The Final stage The admitted students are issued an Admit Cardconfirming their admission to a specific program. The Time Table and date of commencement of classes is displayed on the notice board.

File Description	Document
Link for strategic plan and deployment documents on the website	View Document
Link for additional information	<u>View Document</u>

Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

To ensure growth and progress of the institute according to its vision and mission Strategic Plan is implemented through various activities. One such activity is to develop entrepreneurial skills in students for their self-employment.

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Objective- To develop entrepreneurship in students.

Context- SWOT analysis of peer team during the last NAAC accreditation underlined the need of entrepreneurship development in students.

Strategic plan-

- To organize awareness program in college for addressing the above problems.
- To organize workshops for students for motivating them towards self-employment.
- To organize industry visits for hands on experience
- To train faculty members as trainers to further take up entrepreneurship program on regular basis.

Deployment of the strategic plan:

Our college being the lead college has the responsibility to motivate other colleges under its auspice in the field of quality education. The Quality Circle formed for this purpose consists of 17 Government and 39non-government colleges.

As the first activity of deployment of entrepreneurship based project, In year 2018-19,to develop entrepreneurship. College organized a Quality Circle meet on the theme '**Developing start up eco system in colleges**'. Around 24representatives of various colleges shared their views on the topic. ShriPrasannaNimonkar, State Head, Chhattisgarh, Industrial and Technical Consultancy (CITCON)was the subject expert in the meeting. He floated the idea of entrepreneurship development, and suggested the organization of a Faculty Development Program (FDP) for training of teachers in the field of entrepreneurship, so that they could help students to prepare project plan and run their own start up.

- 1. **Entrepreneurship Awareness Camp (EAC):** This meeting was followed by a three day workshop organized for 80 students of our college from the 8th to10th January 2019 for hands on experience. Students also visited KAPS (Ice Cream) Industry.
- 2. **Faculty Development Program (FDP):** As the third step a fifteen days Faculty Development Program(FDP) was organized from the 18thJanuary to 1stFebruary 2019 in which 20 faculty members from our institution as well as from outside participated. Faculty members visited PARLE –G Industry to understand the intricacies of managing an enterprise.
- 3.**MoU:** For a consistent progress in the field of entrepreneurship, aMoU was signed on 30th March 2019 withCITCON for mutual cooperation in the field of entrepreneurship development and skill training to ensure consistent efforts in this direction.

File Description	Document
Link for Strategic Plan and deployment documents on the website	View Document
Link for additional information	View Document

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

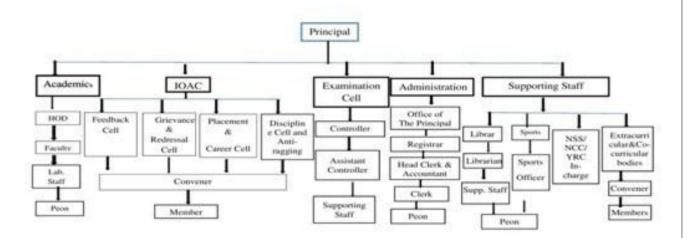
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Response:

The institution has a clearly defined organizational hierarchy. The Principal is the chief administrator of the college and he coordinates all the activities of the college. He is also the chairperson of various committees like IQAC, Staff Council, DRC and others.. Head of the various departments, sports officers, Librarian, Wardens and Faculty in charge of all the committees of the college report to the Principal and carryout the functions of the college. The UGC, State government and the University (Pt. RavishankarShukla University) provide guidelines and directions for the functioning of the institution and the fulfilment of its objectives. The institution has various bodies/cell/committees at various levels for effective functioning of the institution and decision making. The minutes of the meetings are maintained.

All committees' /cell/ bodies discuss on various agenda, points and issues. The outcome of this discussion is the recommendation and finally committee requests for approval and execution. In the subsequent meetings, the progress, achievement of the action taken on the tasks are monitored.

Organogram-



1.Academic-

The administration of teaching departments are done through the HODs, who are responsible for maintaining time table, organizing board of studies, DRC, Alumni meet, coordinates with administration for maintenance of labs and class rooms. HODs are responsible for planning according to the vision and mission of their department. Faculty members and lab staff follow the time table and help HOD in running the department smoothly.

1.IQAC-

IQAC has the responsibility to generate quality consciousness in all dimensions.

IQAC acts as the think tank of the institute and take firm quality initiatives through various committees. Feedback cell collects and analyses feedback all stakeholders and IQAC implements the action taken on

feedback though the administration.

Discipline and anti- ragging committee along with grievance and redressal cell helps in maintaining a congenial environment in the campus.

Whereas career and placement cell takes care of overall development and job orientation.

- 1. Examination cell is instrumental in maintaining the academic calendar, conduct Unit test, quarterly, half yearly, semester and annual examination, result analysis and induction programme for new entrant.
- 2. Office of the principal consists of accounts section and student section which take care of salary, pension, scholarship, fees, and distribution of notices and manages finances.
- 3. The student support facilities are upgraded every year for maximum utilization. Central library is fully automated. Sports facilities for, basket-ball, cricket, athletics, hand-ball, foot-ball and tabletennis are made available to students every year. The college inculcates human values, discipline and social commitment through three NCC wings and one NSS unit. Health awareness programmes are organized through Youth Red Cross.

The institute organizes various events to motivate students for enthusiastically participate in government plans like SVEEP, Swachha Bharat Abhiyan, Unnat Bharat Abhiyan celebration of National days, events and contribute in national development.

Service rules, procedures, recruitment, promotional policies are defined as per the state government rules. The functioning of governing body, Academic council and Board of studies and IQAC is as per directions given by the UGC

File Description	Document
Link to Organogram of the Institution webpage	<u>View Document</u>
Link for additional information	View Document

Implementation of e-governance in areas of operation

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

Response: C. 2 of the above

File Description	Document
Screen shots of user interfaces	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>
ERP (Enterprise Resource Planning) Document	View Document
Link for additional information	View Document

Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression

Response:

To keep the moral of the employees high, the college adopts several welfare measures. One of the welfare functions of the college is that the college should look after the mental and physical health of the staff members. The welfare measures for teaching and non-teaching staff are as per government rules and are as follows:

Teaching staff-

- Hygienic working environment.
- Well maintained work station.
- Advance facility
- Special casual leave for attending conferences/ workshop/ training program and for conducting of practical examination.
- Vocational leave based on academic colander.
- Casual leave, Medical leave, Earn leave as per Government rules.
- Duty leaves for performing government work.
- Medical reimbursement.
- Maternity and Paternity leave for faculty.
- Additional increment after Ph.D. degree.
- Annual increment.
- Group insurance facility
- Staff quarters
- Health facility
- Loan facility
- Post office facility
- Childcare leave

Non-teaching staff-

- Medical reimbursement.
- Festival advance
- Provided uniform and uniform washing allowance

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- Group insurance
- Casual leave, Medical leave, Earned leave and duty leave as per government rules.
- Maternity and Paternity leave
- Staff quarters
- Health facilities
- Annual increment
- Loan facility
- Child care leave

IQACorganizes frequent meetings for training of non-teaching staff; Lab Technicians, Lab attendantsand peons, focusing on theirwork profiles, their grievance and directions on issues related their carrier development and progression. In these meetings Principal interacts with staff in a cordial environment which motivates the employees to work efficiently and maintain discipline.

Frequent health camps are organized for employees to take care of their health and well beings. The local hospital, alumni and NGOs provide all the facilities and support in these activities.

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

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

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

6.3.3 Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

Response: 1

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

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2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document	
Institutional data in prescribed format	<u>View Document</u>	
Link for additional information	View Document	

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 18.48

6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
18	9	7	13	7

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
Institutional data in prescribed format	<u>View Document</u>

Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Institution is run by state government. Internal and external audits are conducted regularly. In last five years four external audits were conducted, while internal audit are conducted every year.

External audits are conducted by Auditor General (AG) office while, departmental audit is conducted by a committee appointed by Department of Higher Education. In last five year two external audits were conducted by AG office for the period of January 2009 to September 2014 and second for October 2014 to

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June 2017respectively on 05-01-2015. In external audits, if any objections are raised by the committee it is resolved on the basis of available documents. In last five years only two objections were raised by the audit committee. The mechanism for setting audit objections is done in two steps. In first step, all relevant documents related to objections are provided to audit committee for settlement, if committee finds document satisfactory then settles the account. If audit committee finds the document unsuitable for the settlement then in second step all the documents are forwarded to the office of Commissioner higher education, Government of Chhattisgarh.

College conducts internal audit in annual basis. To conduct internal audit college has constituted a committee of 4 members. Committee organizes meeting regularly and conducts auditing of fees collection and the bill book used for the purpose.

File Description	Document
Link for additional information	View Document

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

Response: 6.36

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	View Document
Annual statements of accounts	<u>View Document</u>
Link for additional information	View Document

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

Response:

The institute receives various kinds of funds viz. Government, non-government (Fees collection and Janbhagidari), UGC, RUSA, Self finance and Autonomy fund. The institute has a specific strategy to mobilize various funds and ensures its optimal utilization. College adopts all the rules and regulation of Chhattisgarh Government BhandarKrayaNiyam (State rule 1998) for utilization of funds.

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To mobilize the funds, the institution has constituted a planning board consists of all the Head of the departments. Planning board prepares a five year budget as per the guidelines of UGC. Beside this, annual requirements are invited from all the departments. On priority basis, according to the budget, quotation tenders are invited by the college and it is opened before the Purchase Committee of the college constituted by the Principal. Later, college office prepares a comparative chart of articles and on recommendation of purchase committee, Principal issues purchase order for utilization of funds. On receipt of articles, it is distributed to respective departments as per the requirement.

In last five years funds were mobilized in different areas. Viz. UGC fund was utilized for the purchase of equipment and in instrumentation facility, competence building, field work and study tour, extension activities, career and counselling cell. RUSA fund was utilized in construction of eight class rooms. Self-finance fund is transfer to the respective department, while non-government funds are utilized to fulfil various day to day requirements.

In last five year college ensured optimal utilization of funds received from various resources.

File Description	Document
Link for additional information	View Document

Internal Quality Assurance System

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

Case Studies:

Academic Audit-Through the Academic Audit, the IQAC has created a mechanism for self-evaluation for all the teaching departments. Academic Audit format consists of three Parts: Part A is about departmental activities and achievements in all seven criteria; Part B is the Performance Index Calculation for each department; and Part C consists of document validation sheet (Five year Performance Index table of all departments).

The formative and evaluative comments are given by various stake holders on the performance of individual learners, quality of teaching, course content and syllabus.

Feedback from stakeholders- A strong feedback mechanism has been developed by IQAC for improving overall performance of the college in all key areas.

1. Student feedback is collected every year. IQAC takes appropriate action, carries out the strategies planning to implement the suggestions with the support of Principal and teaching staff.

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- 2. feedback of the paper setters/examiners subject experts from other universities, college, appointed members of board of studies are collected on curriculum, question paper pattern and student performance.
- 3. Parents Teachers Meet is organized every year since 2011-12. Their feedback is also registered and communicated to the relevant people.
- 4. The College has a registered Alumni association since 2010. The Alumni meet is organized as per the convenience of the members separately in the various departments. Their support and feedback is duly utilized for the upliftment of quality education.

Post accreditation quality initiatives-

Academic initiatives

- 32% syllabus was revised and updated.
- Change in examination pattern introduced in UG and PG classes, grading system introduced in P.G. program.
- Academic Audit and Feedback system formalized and institutionalized.
- 359 research paper Published and 42 PhD Awarded during last five years.
- Mentor-mentee system is in place.
- Workshops, training and special classes for competitive exams has increased.

ICT enabled teaching/ learning/ E governance-

- The Autonomous Cell has achieved 100% automation from admission to result declaration.
- The Central Library has been fully automated with SOUL 2.0 software.
- The accounts section (e-pay) and the student section (URKUND) in the office is fully automated.
- ICT based teaching methodology has increased.
- Power point presentations by PG students have become an integral part of Continuous Internal Assessment.
- Wi-Fi enabled campus

Gender Sensitization

• Gender Audit published in the year 2017-18 and 2018-19 by Women Cell shows satisfactory participation of girls in all academic and extracurricular activities,

almost all the key administrative and academic portfolios are being held by women in this institute.

Environment awareness

- Green audit is carried out.
- Sustainability cell has taken effective measures to ensure environment protection, energy conservation, recycle & reduce philosophy.

Collaborations

• The IQAC has signed MOUs with the Chhattisgarh Industrial & Technical Consultancy Services and District Employment & Self-Employment Cell to raise employability and entrepreneurship

skills.

- The no. of MOUs has increased sufficient (17 MoU).
- Industry representatives are included in Board of studies, IQAC and other committees.

Enhancing Quality culture

• The college takes care of the NAAC accreditation Process of all the 112 colleges under it, as lead college, through the Quality Circle.

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

The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

The teaching learning process and methodologies are constantly updated by IQAC. As a result usage of ICT has increased. Continuous and comprehensive evaluation process is strictly followed to ensure learning outcome. New courses and programmes are being added to enhance employability.

We have chosen two examples to elaborate our efforts:

• a. Up gradation of curriculum and evaluation methods :

- In last 5 years 3 new PG programmes have been introduced, 32% syllabus was revised and 3 elective papers were introduced in order to increase employability and developing research skills.
- A modification in the question paper pattern of both UG and PG classes was introduced for comprehensive and competitive evaluation and assessment of the students. Unit tests, Quarterly and Half yearly exams are organized regularly in which question paper pattern is similar to final exam pattern, the answer sheets are shown to students for self-evaluation and feedback. The need was to formulate different strategies to achieve and evaluate different learning objectives. Multiple choice questions test knowledge, short answer type questions test skill of writing answers to-the-point where as essay type questions test the thinking and analytical process. Experiments and projects are meant for hands on experience and experiential learning.

• B. New methodology for teaching learning-

- Many new teaching processes are being adopted by professors to ensure learning outcomes and due to this quality consciousness is being spread in this regard by IQAC. Some of them are as follows-
- 1. Power point presentation used to deliver lectures and course content effectively by teachers, which test attitudes and preparedness of students
- 2. Student seminar is presented mostly using power points. They are encouraged to add videos and

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- hyperlinks etc. for more effective presentation.
- 3. Concept of flipped class rooms are used where a topic is declared beforehand. Students discuss and present it in the class rooms, and role of teacher is as a facilitator who provides necessary feedback.
- 4. Teaching by senior students is done in PG classes where the final year students select a topic of their choice and teach it in M.Sc. Previous class.Learning by teaching is known to be the most effective method of learning. This also gives students a chance to get assessed by the peer group.
- 5. Use of online platforms is enhanced in recent years. Students are registered in NPTEL,SWAYAM and e PG Pathshala. You tube videos are being shared in Whatsapp groups in different subjects. Social media is being used for dissemination and delivery of course content. Smart phones are being used as teaching tools creating
- 6. e Herbarium, online tools like picture this are being used for identification of plants.
- 7. Exposure trips are organized for exposure to industries, other established labs and institutes; field work by students is encouraged for experimental and experiential learning.
- 8. Interdisciplinary lectures are organized regularly to keep students aware of the latest development in various subjects.

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

Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- 2. Collaborative quality initiatives with other institution(s)
- 3. Participation in NIRF
- **4.**Any other quality audit recognized by state, national or international agencies (ISO Certification)

Response: 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Any additional information	<u>View Document</u>
Link for additional information	<u>View Document</u>
Paste web link of Annual reports of Institution	<u>View Document</u>

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Criterion 7 - Institutional Values and Best Practices

Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

The college has a very free environment where girls feel free and safe.

Curricular-

Reservation and Concessions: There is 30% reservation for girls during admissions at both UG and PG levels. Special concessions in fees are given to girls.

Mahila Protsahan Puraskar is given to meritorious girl students at UG and PG students.

Vikita Agarwal Memorial Scholarship has been received by girl students.

The **curriculum** has gender issues in Defense Studies, and Foundation Course (English and Hindi) prescribed Text books.

Co curricular activities-

The Gender Issues Cell at the College monitors all activities and training programs related to safety and security of girls.

Women's Day is celebrated every year with slogan and essay writing and painting competitions. Lectures on Gender Equality in Education and Gender Equality have been organized. A program on Women's Health, was organized for female faculty, students and staff. Operation Garjana guided students on self defense.

NSS – **P**rograms are organized by the NSS for gender equity and sensitization.

NCC - Women cadets in NCC have received Women Cadet Welfare Award and Shakti Award.

Safety and Security:

Safety and security are the top priority. It is a matter of pride that the peaceful and gender sensitive campus hardly has cases of any violation.

The Woman Harassment Cell has been constituted under The Sexual Harassment of Women at the Workplace (Prevention, Prohibition and Redressal) Act 2013. The College has a zero tolerance policy towards any violation, indiscretion and transgression. The college is committed to provide a safe and conducive academic environment to students and its employees and is extremely alert to matters pertaining to any kind of harassment and gender violation. The cell meets to address complaints from students, teaching and non-teaching members, if and when required, to take necessary action.

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The **Anti-Ragging Committee** is formed as per UGC guidelines. The students sign and submit an affidavit when they are admitted in the college where an oath is taken from students to not get involved in ragging. The Anti-ragging Committee and Discipline Committee check ragging in the campus. Anti-ragging posters prominently displayed.

The **Girls Hostel** is located in the safe zone amidst staff quarters and other Hostels. Security guards and staff are always on duty. The hostel provides a safe and comfortable environment and is a Zero ragging zone. The Hostel is managed by the Warden and Hostel Committee in consultation with the college Principal.

The **Main Gate** of the campus has guards. The entry points into the main building are screened by CCTV cameras.

Counseling:

The college addresses gender sensitivity through Mentor – Mentee mechanism. Departments organize special counseling. The campus is woman friendly and facilitates women development. Teachers counsel students.

Common Room:

There is a proper Girls Common Room. Common areas in the college, like the research scholars rooms, the auditorium, canteen and gardens are safe as they are monitored by CCTV cameras.

Staff quarters have been allotted to women faculty and staff.

The Institution has facilities for alternate sources of energy and energy conservation measures

- 1. Solar energy
- 2. Biogas plant
- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment

Response: B. 3 of the above

File Description	Document
Geotagged Photographs	<u>View Document</u>
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

• Solid waste management

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- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Response:

Liquid Waste Management:

Waste is an obvious culprit and pollutant, contributing to landfills and toxins which harm the earth's soil and atmosphere. Keeping this in mind, the waste material in college is segregated into biodegradable and non-biodegradable wastes, and as toxic and non-toxic wastes in the laboratories. Indiscriminate use of chemicals is discouraged during practical classes and college does not have permission to use radioactive substances in its laboratories. Liquid waste from the points of generation like the canteen and toilet etc is let out as effluent into a proper drainage facility and to avoid stagnation.

Solid Waste Management: College adopts the policy of Reduce, Recycle and Reuse (3Rs). We produce our own manure by vermicomposting. Leaf composting is done in-house which is also put on sale in months of excessive leaf fall in order to clean the pits. Students and staff are also encouraged to purchase organic vegetables. Department of Physics develops teaching-learning materials such as science kits and educational games for children with special needs from waste materials. Department of Botany, Biotechnology and Microbiology have been making useful new products from waste materials.

College has tied up with "SAI – Waste Paper Recycling Services" for managing its paper waste. All the used paper of college is sent to them which is recycled into useful products like notepads for use by college staff and students. The college proposes to set up Effluent Treatment Plant in collaboration with the state government through its sustainability cell.

- **e** -waste management: College maintains all its computer peripherals and takes pride that it has been actively involved in recycling all the computers and its components. This also ensures that computer accessories are being maintained at minimal cost. Computer Resource Centre ensures buy back of lithium batteries and ink cartridges, while making new purchases. The major e-waste such as written off instruments/equipment, CRTs, Printers, Computers.
 - Electronics gadgets, circuits, kits have been written off on regular basis.
 - All the miscellaneous e-waste such as CDs, batteries, fluorescent bulbs, and electronic items are collected from every department and office and delivered for safe disposal.
 - Useful parts of the electronic gadgets like capacitors, inductors, diodes, transistors, etc. have been removed from the gadgets for reuse in practical/projects.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geotagged photographs of the facilities	<u>View Document</u>

Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	<u>View Document</u>
Any other relevant information	<u>View Document</u>
Link for any additional information	<u>View Document</u>

Green campus initiatives include:

- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4.Ban on use of Plastic
- 5.landscaping with trees and plants

Response: Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	<u>View Document</u>

Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions / awards
- 5. Beyond the campus environmental promotion activities

Response: A. Any 4 or all of the above

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File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document

The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Disabled-friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment
- 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: C. 2 of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	<u>View Document</u>
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

The harmonious peaceful ambiance of the college reflects a long standing culture of not tolerating, but embracing diversities. It stands proudly unique in this aspect, especially in times when educational institutions are hotbeds of hatred, fear, enmity, divisiveness and segregations. This sense of inclusiveness and solidarity in the institution is the umbilical cord that has transcended historical time and binds the past and the future. The smooth functioning of the college is a proof of a warm inclusiveness, free of prejudice. Indiscipline and issues of conflicts and differences are very few, especially considering the fact that the college has more than 2000 students. The atmosphere is of peaceful cohabitation, a quality that defines the simple minded people of the region. Complete communal harmony is maintained as the people of the state are simple and peace loving. Fair, equal treatment of all students is the mantra.

Linguistic difference does raise its head sometimes because students come from Hindi and English medium schools; Hindi medium students are a majority. The language problem is solved by bi-lingual teaching. Fair communication is guaranteed. Even the evaluation process includes both languages.

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Academically, the college takes special initiatives to promote the culture of embracing diversities on all fronts: curricular, co curricular and extra- curricular. The prescribed text books of English and Hindi include essays on the beauty of unity in diversity, thereby developing an understanding and respect for inclusiveness. Chapters on philosophy are also a part of the syllabus of Defence Studies. Co-curricular activities focus on inclusiveness.

The extracurricular activities include celebration of important festivals and birth anniversaries of leaders. Rashtriya Ekta Divas is celebrated on 31st October, the birth anniversary of Sardar Vallabhai Patel, the architect of a united unified inclusive India. Vivekanand Jayanti is celebrated with great enthusiasm, emphasising and attempting to ingrain in the minds of students, the vision of universality of religion and humanism propagated by this saint. The Swami Vivekanand Garden in the college has a beautiful statue of Vivekanand, thus making him and a powerful presence. Gandhi Ji's ideas pervade the environment of the college. The library has a unique and treasured collection of old valuable books, most out of print now, on Gandhi. The books are displayed on 2 October. A number of activities mark the occasion and the 150th Anniversary of Gandhi was celebrated with great fervour.

Administratively, the institution ensures that equality, justice and the dignity of all individuals is maintained and a sense of solidarity, inclusiveness and camaraderie is maintained. The college has formalized and institutionalised an Equal Opportunity Cell, a Grievance Redressal Cell, and a Women Harassment Cell. The Students union and all student bodies maintain a liberal democratic outlook.

Benefits of reservation during admissions; scholarships; fees; free books and others are meted out with largesse towards the less fortunate in the socio-economic spectrum. This helps to maintain empathetic harmony.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

The Preamble to the Constitution states that Indians shall get justice, liberty, equality, without any discrimination, and the end objective is to ensure a sense of fraternity. The need today is the development and grooming of students as upright responsible citizens. The onus rests with HEIs as they have students who are adults, and who can be trained to accept responsibilities.

The GNPG College of Science aims to develop the qualities of true citizenship through curricular, cocurricular and extra- curricular activities.

Curricular - The duties and responsibilities of citizens have been incorporated in the curriculum. The book prescribed for Foundation Course (English) Part I has essays on topics which are directly related to

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citizenship like, Freedom Struggle, Dandi Salt March, Fundamental Duties, Aspects of the Indian Constitution. The Hindi textbooks too have such segments. Defence Studies CO has sections dealing with Effective Citizenship, Peace and Security, World Peace, Justice, and the UN Declaration of Human Rights. The Environment Science paper has a unit on Human Rights, Fundamental Duties and others.

Co-curricular-

English and Hindi Societies organize competitions in writing skills, debates, extempore where topics are directly related to citizenship values, rights and duties. These competitions develop critical insightful thinking and expression, and develop awareness of responsible citizenship among speakers, opponents and listeners. Liberty of expression is a yardstick.

SVEEP (**Systematic Voter Education and Electoral Participation**) programs of the state are anchored in the college as it is a Lead College. A number of programs were conducted on and off campus to raise awareness about citizenship rights and responsibilities. The college convener of the SVEEP programs was awarded for contribution in the field.

Students' Union activities sensitize and nurture qualities of a liberal inclusive democratic work culture.

Important National Days are celebrated with sincerity. Oaths to respect and adhere to the Constitution are taken by faculty and students on the Independence Day, Republic Day and others.

Samvidhaan Divas, Rashtriya Ekta Divas, Sainik Divas, Shaheed Divas, Flag Day are observed with solemnity and commitment. Gandhi Jayanti and Vivekanand Jayanti help foster respect for India and what it stands for and helps inculcate the values of citizenship.

The alumni martyrs of the college, Major Gore, Rajeev Pandey, Yugal Kishore Verma and are remembered and honoured. A garden in the campus is devoted to them. The institution thus sends forth a strong message of citizenship. These alumni have given the ultimate sacrifice of life itself on the altars of nationhood.

The 150th Anniversary of Mahatma Gandhi witnessed many class performances devoted to Khadi, Films, Marches, and various other competitions.

The NSS, YRC, and NCC are actively involved in carrying out programs that inculcate the values and duties of rightful citizens in serving the nation.

The faculty members of the college are actively involved in the designing and implementation of all the above programs.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible	<u>View Document</u>
citizens	

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7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

Response: C 2 of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

National festivals like Republic Day, Independence Day, Ekta Diwas or National Unity Day (31st October) are celebrated annually.

Martyrs Day (30th January) is observed with respect in memory of the father of the Nation, Mahatma Gandhi. **The institution pays respect to its martyrs. Alumni** Major Gore, Rajeev Pandey, Yugal Kishore Verma are remembered and honoured.

On International Yoga Day(21 st June) the faculty members and students gather together and perform yoga.

Gandhi Jayanti (2nd October) & **Gandhi** death (**30 January**) was celebrated by the Library Department by organising Gandhi -Books-Exhibition and Gandhi Painting Exhibition. .

International Diabetes Day (14th November) is celebrated regularly by the Environment Green Society of the college. Painting competitions and Painting Exhibitions on the theme of Diabetes are conducted.

International Ozone Day (16th September) was celebrated by the Chemistry Department by organising a lecture.

International Photography Day (19th August) is celebrated regularly by the Photography Society of the college.

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International Environment Day (5th June) is celebrated regularly by the Environment Green Society of the college. Painting, rangoli and photography competitions and Painting Exhibitions on the theme of environment are conducted.

International Tiger Day (29 July) is celebrated by the department of Zoology. It involves poster making , Rangoli, etc competition every year.

National Science Day (28th February) is marked by programs conducted by the Science Club.

Women's Day (8th March) sees the organization of health camps and lectures on women, organized by departmental societies.

Teacher's Day (5th September) is celebrated with great interest by the students in all the departments of the college.

Hindi Divas (14th September) Competitions and programs are organized by the Hindi Society.

NSS Day (24th September) is celebrated by the NSS unit.

Chhattisgarh Day (1st November) is a holiday but students and faculty are involved in the Rajyotsav.

NCC Day celebrations are organized by the NCC cadets, who also organize Sainik Divas (15 January). Flag Day/ Armed Forces Day (7th December) is marked by the distribution of badges to everyone in the college.

Samvidhan Diwas (26 November) is celebrated.

National Youth Day (Vivekanand Jayanti) (12th January) is marked by organisation of essay and debate competitions.

National Library Day(Dr.S.R.Rangnathan Jayanti)(12August) was celebrated by the Library Department by organising Books-Exhibition and Painting Exhibition.

National Mathematics Day(Dr.Ramanujam Jayanti)(12November) was celebrated by the Mathematics Department by organising a lecture.

150th Anniversary of Mahatma Gandhi (2108-19) The 150th Anniversary of Mahatma Gandhi witnessed many class performances devoted to Khadi, Films, Marches, and various other competitions.

SVEEP (**Systematic Voter Education and Electoral Participation**) programs of the state are anchored in the college as it is a Lead College. A number of programs were conducted on and off campus to raise awareness about citizenship rights and responsibilities. The college convener of the SVEEP programs was awarded for contribution in the field. Voter Awareness Oath Taking was celebrated.

Swachhta Abhiyan saw the conduct of various Swachhatha Campaigns where faculty and students went on a clean campus drive.

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File Description	Document
Geotagged photographs of some of the events	View Document
Any other relevant information	<u>View Document</u>
Annual report of the celebrations and commemorative events for the last five years	<u>View Document</u>

Best Practices

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response:

1. **Title:** Skill Development Initiatives for the Achievement of Local and Global Competencies

2. Objectives:

The chief objectives of Skill Development Initiatives are:

- To empower students for financial independence
- To increase employability level
- To train for industry and organization
- To boost local self employment
- To target local agricultural, rural and forest based industries
- To develop global technical skills
- To develop communication skills
- To inspire creative and innovative thinking
- To teach collaboration, cooperation and team spirit

3 The Context:

The institution is a government college where the majority of the students come from poor rural tribal family backgrounds. They need special care and empathy. Livelihood is a basic necessity for most.

Unemployment is a major crisis in India today, more so in Chhattisgarh.

Poverty forces many students to pursue basic degrees as they cannot afford professional courses.

Current statistics show that a very small percentage of the total educated employable youth in India have skill development training.

A skilled work force is a necessity for productive economic growth at local, national and global levels. Technological fields offer lucrative opportunities in the 21st century.

Chhattisgarh is developing fast and is ready to offer new job and self employment opportunities and this initiative aims to make students ready to earn a livelihood.

4. The Practice:

The College is committed to the future employment and self employment of its students. The number of programs organized in the last five years bears testimony to this commitment. The uniqueness of this best practice rests in its approach to prepare students for both local and global competencies. The practice targets indigenous agro based industry as Chhattisgarh is largely rural. The state also has a burgeoning industrial sector which needs skilled human resources. It is also developing fast in the IT sector and needs ICT trained students. The details of skill training programs is attached.

The college works in close collaboration with:

CITCON (Chhattisgarh Industrial and Technical Consultancy). CITCON is linked with the ideas that target MSME (Ministry of Micro, Small and Medium Industries) industries.

PMKVY (Pradhan Mantri Kaushal Vikas Yojna) is the flagship scheme of the ministry of Skill Development and Entrepreneurship.

CIPET(Chhattisgarh Institute of Plastic Engineering and Technology Raipur

And many more academic and research institutes

- 5. Evidence of success: All relevant documents attached.
 - MOU's: MOU's have been signed with CITCON and CIPET. MOU's with IKVV, Agroindustries and Health sector are in the pipeline.
 - Collaboration: The skill development programs collaborate with academic and professional bodies to target fields of farming, fisheries, gardening, sericulture, mushroom cultivation, forest industry, materials modeling and ICT.
 - Representative Case Studies:
 - 1. Ramlal Lahare, MSc Biotechnology (2018): Lahare, a Gold medalist, is the proprietor of an ISO certified Lahare Spectrum Company, with fssai registration. It sells special chilli pickles with no chemical preservatives. He discovered the CG "Jaiya Mirchi". His research is in collaboration with IG Krishi Vishwavidyalaya, Raipur. He cultivates jaiva chilli on his farm in Waldorfnagar, Sarguja, CG. Ramlal Lahare has won the Innovative Farmers Award 2020 by Indian Council for Agricultural Research (ICAR).
 - 2. **Divyendra Singh,** MSc Geology (2015) is a successful entrepreneur. His initiative, DSR Infrastructure offers consultancy as a Hydro Geologist, and takes up PWD contracts. He employs MSc Geology students.
 - 3. Pushpendra Sinha, BCA III (2019) is an intelligent self employed student who is developing

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websites. He is highly skilled in HTML 5, CSS3, JAVASCRIPT, JQUERY, MYSQL, PHP,Google S.E.O. Website: https://webdhamtari.com

6. **Problems encountered**: No major problems faced during organization of skill development programs. Financial problems are faced during setting up as an entrepreneur.

Best Practice 2 - The Green Zeitgeist

(Zeitgeist is the general intellectual, moral and cultural climate of an era. The Green Zeitgeist is a conscious and conscience driven commitment)

Title: The Green Zeitgeist

1. Objectives:

- To create an inclusive organizational fraternity through a green bonding
- To develop and accelerate an intellectual and moral consciousness of the environment crisis
- To envision a green peaceful future
- To frame policies and practices that support the green initiative
- To reduce air, water, soil and sound pollution
- To conserve energy, water, soil and biodiversity
- To raise awareness on the environmental crisis
- To improve waste management
- To create a peaceful environment
- To nurture nature
- To enforce urgency about the environmental issue
- To extend the benefits of green therapy
- 1.**The Context**: The environmental crisis today threatens unprecedented harm of frightening dimensions. The crisis needs to be taken up urgently. Higher education plays a vital role in developing a mindset for the Green Zeitgeist.

Chattisgarh is blessed with green ecological wealth. The NGGB program of the Chhattisgarh Government shows its awareness and responsibility towards maintaining a green economy in CG. The college, the oldest of the region has benefits of history, location, academic disciplines, faculty and research centres to nurture the green zeitgeist. It has taken up the responsibility to expand the green movement multi dimensionally. The environmental concern defines the college, and is evidenced in its activities.

The Practice:

- 1. The Green Zeitgeist rests on the bedrock of a belief system moving both **vertically** through governance and **horizontally** across sectors in a **multi pronged** approach.
- 2. **Environment Green Society:** The Society conducts discussions; photography, rangoli and painting competitions; wall paintings; painting exhibitions and exhibition of the rarest books on Mahatma Gandhi.
- 3. Green campus drives: The campus has many old trees. Tree Plantation is an annual event.

- Departmental Green Courtyards, Corridors and a Botanical garden with medicinal plants are maintained.
- 4. **Sustainability Cell:** The Cell is linked with NGGB (Narwa-Garwa-Ghurwa-Badi) which means Canals, Cattle, Manure pits and Kitchen Gardens as the four symbols of CG. The cell coordinates with Makrand Bhoot, an alumni, based in New York, and the founder of PATH (Professional Alliance for Technology and Habitat) through UN PATH–Vidyarthi Cell for SDG.
- 5. **Policy management**: Policies for construction; waste management; pollution control; plantation; water harvesting.
- 6. **Academic Initiatives:** Addition of an impressive number of new papers and syllabus components on environment. Environmental Science is a compulsory paper for BSc.
- 7. **Infrastructural initiatives**: The main building reflects the vision of our founders and is designed with high ceilings, tall windows and ventilators, reducing temperature and consumption of electricity. Only **vertical expansion** in spite of availability of land.
- 8. Pollution Control Drives: a) No plastic b) No smoking c) Water filters c) Tree plantation d) Few vehicles e) Disposal of chemical waste f) Checking sound pollution.
- 9. **Conservation: a) Conservation of energy** through the installation of solar panels, use of LED lights and infrastructural initiatives. b) **Conservation of water** through efforts at maintaining the ground water level by direct method, artificial recharge pits and through the construction of roof top and run off rain water harvesting structures. The bore wells maintain a supply of water even in the dry heat of summer. c) **Conservation of soil** through soil enrichment in the green forest pockets; vermi-composting and soil replenishment during plantation. d) **Conservation of Biodiversity**.
- 10. **Waste management**: Policies for solid, liquid and e-waste management through the three R's (Reduce, Recycle and Reuse). Digitalisation has **r**educed paper waste. Jagruti, paper waste management NGO.
- 11. **Raising awareness:** The initiative raises awareness through lectures, competitions and other activities organized by the Environment Green Society, NSS, NCC and Departmental Societies.
 - 1. Evidence of Success: The following initiatives are taken during last 5 years. The links and photographs are uploaded as additional files below:
- Environment Green Society: Records maintained Youtube page
- Sustainability Cell: Facebook page
- Green campus: The green campus is the evidence of the organizational evolution of a green ethos.
- Green Audit Report: link.
- Energy Audit Report: The Audit details the success of the green movement. Link
- Clean campus
- Climate: The temperature of the college campus is lower than that of the rest of the city due to the greenery.
- Awareness programs: The College is a vanguard for the green movement, conducting programs in the college and neighbouring regions. Link
- Pavers: The environmental concern is seen in the use of pavers instead of cement.
- Research: Research work on environment. Link
- Project work in BSc EVS. Link
- **6. Problems Encountered**: The Green Zeitgeist is a morally committed project and so the problems faced have been conquered. The main problem encountered is mobilisation of funds for the green initiative. Faculty members and alumni have been making quiet contributions to the cause.

7. Notes: Higher Education Institutions ideally should take up the Green Zeitgeist, as it can be committed to globally but acted upon only locally. Small endeavours can lead to great movements and save the world.

File Description	Document
Best practices in the Institutional web site	<u>View Document</u>

Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

"Go vocal for local" is a mantra adopted by the college.

Institutional responsibility to the local community of Chhattisgarh is the unique distinctiveness of the college, which has been deeply linked to the roots of development of the region since 1948. Chhattisgarh's geographical, geological, sociological, economic and demographic characteristics set the keynote for all policy decisions.

1.Academic focus and research:

Impact on the local community, financial empowerment, checking migration, finding solutions to local problems, contributing to the development of Chhattisgarh has been the academic focus.

A **New papers and topics** added to the syllabus in the past five years reveal the foresight of the institution in preparing students for a future where they can avoid migration, get employment locally on their own lands and positively impact the region. The changes are in keeping with the rural- tribal base and needs: agriculture, fisheries, forestry, water resources, industries and others. Global competencies like ICT have not been neglected as there is scope for growth in this field.

The **publication of about 300 research papers** in UGC peer reviewed journals, many with high impact factors and H-Index in the last five years in a single faculty college is a benchmark. Faculty has research collaboration with foreign institutes. Dr Sarabjot Kour from Department of Chemistry has a patent on polymers project. Dr Pallavi Sinha from department of Zoology has completed her postdoc from IIT KGP.

(https://gnscr.ac.in/Admin_1/Upload_Data/Documents/3.1.1%20research%20samiti%20minutes,%20Final%202020.pdf)

https://scholar.google.com/citations?hl=en&user=_Z0nIhsAAAAJ

https://scholar.google.com/citations?hl=en&user=WHAGwg0AAAAJ

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https://www.gnscr.ac.in/Admin_1/Upload_Data/Documents/3.7.1%20%20Collobaration%20Activities_compressed.pdf

2. **NGGB:** The college is linked to Chhattisgarh government's **NGGB** (Narva, Garua, Ghurva and Baadi) program with its focus on developing rural economy through maintenance of canals, cattle, manure pits, and kitchen gardens. PhD research work on the concept of Baadi and its impact on nutrition have been done.

3. Tackling Maoist insurgency in Chhattisgarh:

Department of Defiance Studies has the only research Centre in Chhattisgarh.

Terrorism and violence are 21st century's biggest bane. Chhattisgarh faces violence and threats due to insurgency in its Maoist belt in Bastar, an area of deep forests and rough terrain. Given this context, research work in this field gains prime importance. PhD and research work focus on the Naxalite problem, security, international relations and finding solutions to this local problem. Faculty have a DLitt degree in the subject. Department **alumni** are in the services. The institution honours its **martyrs**, Rajeev Pandey and Yugal Kishore Verma.

(http://gnscr.ac.in/defence.aspx?7)

CG Initiated Peace Studies and Research Foundation (Website: cipsrf.org) is founded and run by alumni. The socio economic causes of the rise of naxalism in rural tribal belts; urban violence; techniques to stop violence are the focus.

4. Empowering women of Chhattisgarh in Science : Mahila Protsahan Puraskar

Mahila Protsahan Puraskar, is a unique concept in practice since 2010. It provides financial support to meritorious girl students in science, thus rendering service to the community, to science and to women. It is a global concern today that the percentage of women scholars in science and in the employment sector related to science is poor. The UN and the Indian Academy of Science attempt to study the barriers that inhibit women from entering this field. Backward and archaic mindsets believe that science is a male domain with few girls opting for it in higher education. The issue is disturbing and challenging. The college, the top science institution of the region has taken up this challenge and responsibility.

The *Mahila Protsahan Puraskar* came into practice due to the initiatives of late Dr Geeta Tiwari, the visionary Principal of the college in 2010 who linked it to the *Mahila Seva Avem Kalyan Samiti*, a reputed body with the then honourable First Lady, Mrs Vimla Narasimhan as the President and Mrs Veena Singh as the Vice President.

A cheque of Rupees 15 lakhs was donated by the *Mahila Seva Avem Kalyan Samiti*, Raipur, Chhattisgarh to encourage meritorious girl students in their education in science by constituting cash awards. The donation came with a formal set of rules and regulations, securing the amount in Fixed Deposit for ten years. The annual interest on the Deposit is used for cash awards to girl students on the basis of merit. The award is given to the top scorer in each PG subject and the top female scorers at the UG level, one each from the Mathematics and Biology. The meritorious students are identified by the Autonomous

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Examination cell. Since the initiation of this award, many girls have gone into research in science.

5. Contribution to Community Health: Sickle Cell Anaemia

Sickle Cell Anaemia is a painful life threatening inherited disorder. Studies reveal that a tenth of the population of CG is afflicted by this illness. Deep sociological-psychological distress are connected to this illness. The institution's sense of allegiance to serving the region manifests itself in the work that has been done in this field since 2010.

6. MOU with the Chhattisgarh Sickle Cell Institute helps in providing free medicines, follow ups and tests to students. Sickle cell identification camps are organized in the college. Students identified with this illness are counseled and sent to the Sickle Cell Institute. Faculty and students visit other camps.A **PhD** Thesis on this area has been submitted. A **CGCOST** (Chhattisgarh Council of Science and Technology) sponsored Project on Sickle Cell Anaemia was completed in 2019.

7. Industry Academia interfacing:

An MOU with CITCON (Chhattisgarh Industrial and Technical Consultancy Centre) & CIPET (Chhattisgarh Institute of Plastic Engineering and Technology) for entrepreneurship programs has been signed to help students in the government's MSME (Middle, Small, Micro Enterprises) initiatives. Skill development programs; computer literacy drives; placement initiatives help in employment. Vocational training programs focus on rural industry training; mushroom cultivation; industrial visits; field trips; fisheries; film and media training have been organized

(https://gnscr.ac.in/Admin_1/Upload_Data/Documents/3.1.1%20research%20samiti%20minutes,%20Final%202020.pdf)

File Description	Document
Any other relevant information	<u>View Document</u>
Appropriate web in the Institutional website	View Document

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5. CONCLUSION

Additional Information:

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The college is linked to Chattisgarh government's **NGGB** (**Narva**, **Garua**, **Ghurva** and **Baadi**) program with its focus on developing rural economy through maintenance of canals, cattle, manure pits, and kitchen gardens. PhD research work on the concept of Baadi and its impact on nutrition has been done.

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Concluding Remarks:

The institution keeps up with its honourable tradition of being one of the oldest and best colleges of the region. It was founded in 1948 on the wings of aspiration of independence, fired up with the imagination to educate the youth of this region, deemed then just a backward pocket of the vast Central Provinces. The visionary viability of its foundation has been underlined by its rich history. It was given the status of Model College and named Adarsh Mahavidyalaya; was the first college to be granted Autonomy; and was awarded with the status of

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College with Potential for Excellence.

It has been given the status of Lead College by the government and it initiates the achievement of quality in education in the colleges of the region. The college has the highest standards in education in Science in Chhattisgarh. It has a record of developing a humane social outlook in its students through its social outreach activities.

The institution aims to become an **Institute of Science** and get complete autonomy to start new courses, grant degrees and frame its own curriculum. As per NEP, the Institute also plans to include Humanities and Social Sciences as interdisciplinary education is the future, where the student has the liberty to choose courses across disciplines. The NEP is planning to liberate higher education from the shackles of affiliation with universities. It plans to set up guidelines for quality in HEI's to be adhered to by all institutions. The grant of funds would be from the government. The institution, GNPG College of Science has the required vision; infrastructural setup; research centres; faculty; student strength; support from stakeholders to be granted complete autonomy. Scientific development, linked with human values and ethics, is the future. Higher education can take the state and nation forward. Chhattisgarh has an exigent need for an Institute of Science.

The state and its future generations would gain with the establishment of the Institute of Science.

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