

Re-accreditation Cycle II Self Study Report

Submitted To

NATIONAL ASSESSMENT & ACCREDITATION COUNCIL

Dr. Tejavathi Gudipati
Co – ordinator

Dr. Archana Srivastav
Director, IQAC, CLS NAAC

Dr. Meenu Rai
Principal

Our inspiration



Our College Pillars





COLLEGE OF LIFE SCIENCES

Mandre Ki Mata, Cancer Hills, Gwalior (MP) - 474009



Ref. No. CLS/2015/NAAC/403

Date 20.11.15

To,
The Director
National Assessment and Accreditation
Council (NAAC)
P. O. Box. No. 1075,
Opp: NLSIU Nagarbhavi,
Bangalore -5600072, Karnataka

Subject : Sending hard & soft copy of SSR.
Ref : College Track ID MPCOGN12392

Dear Sir,

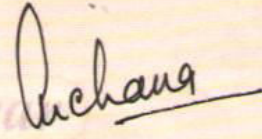
We are glad to inform you that our college has uploaded the "Self study Report" on our college website www.collegeoflifescience.org. Same has been informed to CPU, WEST by e-mail (capuwest@gmail.com).

We are sending one soft and five hard copies (CD) of the SSR along with Demand Draft no. 052124 dated 07 November 2015 of Rs. 1,14,000 (Rupees one lakh fourteen thousand 1,00,000 + 14% tax). We propose the date for inspection in the month of August 2016 onwards.

20 November 2015

Gwalior

Enclosures: Demand Draft-
: SSR


Principal
College of Life Science
Cancer Hospital Research Institute
Gwalior (M.P.)

Tel. : 91-751-2336502-5 | Fax No.: +91-751-2336506 E

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COLLEGE OF LIFE SCIENCES

Mandre Ki Mata, Cancer Hills, Gwalior (MP) - 474009

Ref. No. CLS/2015/NAAC/402

Date 20.11.15

Certificate of Compliance

(Affiliated Colleges and Recognized Institutions norms)

This is to certify that College of Life Sciences, (Jan Vikas Nyas), Cancer Hospital Campus, Gwalior fulfils all norms.

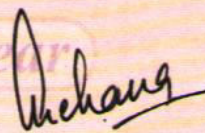
1. Stipulated by the affiliating University and/or
2. Regulatory Council/ Body and
3. The affiliation and recognition (if applicable) is valid as on date.
4. In case the affiliation/ recognition is withdrawn by the authority concerned the same will be informed to NAAC immediately.
5. In case the affiliation/recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

In case the affiliation/recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC 's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or recognition by the regulatory council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

20 November 2015
Gwalior


Principal

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COLLEGE OF LIFE SCIENCES

Mandre Ki Mata, Cancer Hills, Gwalior (MP) - 474009

Ref. No.*f/-*.....

Date*20.11.15*.....

Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

[Signature]
Principal

1990-2015
Celebrating Silver Jubilee Year

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Internal Quality Assurance Cell

Dr. Meenu Rai	Principal
Dr. Archana Srivastav,	Director, IQAC
Dr. Tejovathi,	Coordinator
Dr. B.R. Srivastav	Managing Trustee Jan Vikas Nyas
Smt. Samiksha Gupta	Community representatives
Dr. Jyoti Prasad	Community representatives
Dr. Archan Bharadwaj,	External Experts
Dr. Madhu Gupta	Member
Dr. Sunita Bhargava	Member
Dr. Abhinav Srivastav	Member
Mr. Nishant Sharma	Member
Mr. Umesh Kushwah	Member
Dr. R.K. Dhakad	Alumni member
Dr. Raghavendra Mishra	Alumni member
Mr. D.K.Mohanti	Administrative Representative
Mr. N.D. Srivastav	Administrative Representative

Members of Governing Body

Name	Position	Address
Dr. B.R. Shrivastav	Chairman	Founder Trustee, Jan vikas Nyas
Dr. I.B. Singh	Member	Director Higher Education, Gwalior
Dr. A.K. Jain	University Representative	Prof. SOS in Botany, Jiwaji University, Gwalior
Dr. D.C. Gupta	University Representative	Professor, SOS in Physics, Jiwaji University, Gwalior
Dr. A.K. Moonghe	University Representative	Dean, Ayurvedic College, Gwalior
Dr. Smt. Monghe	University Representative	
Dr. Archana Shrivastav	Member	Principal College of Life Sciences
Dr. Meenu Rai	Secretary	Principal, College of Life Sciences, Gwalior
Dr. Madhu Gupta	Teacher Representative	Dept. of Botany, College of Life Sciences, Gwalior
Dr. Abhinav Srivastava	Teacher Representative	Dept. of Biotechnology, College of Life Sciences, Gwalior

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College of Life Sciences : A Profile

The emerging need of professional personalities in the field of Life Sciences encouraged Smt. Kamla Sahai and Shri Shitla Sahai ji to establish College of Life Sciences (CLS) as a prestigious educational college. Their dream which was visualized in the year 1990 come true when CLS was established under the aegis of Jan Vikas Nyas. We are proud to say that it is the first Educational Institution in Life Sciences in Gwalior City to start with the Post graduation courses in Applied Microbiology and Applied Biochemistry. College has permanent affiliation to the Jiwaji University, Gwalior.

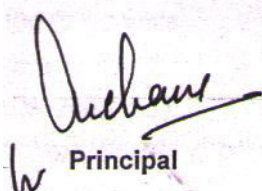
The Jan Vikas Nyas was founded by Late Smt. Kamla Sahai and Shri. Shitla Sahai ji in the memory of their beloved only son Late Shri Rajiv Sahai, who lost his valuable life because of cancer. They pledged to give help to the people of this region and support in all aspects related to human welfare in general and cancer control in particular, by way of generating cancer awareness, its early detection and treatment at Cancer Hospital & Research Institute, Gwalior. The Jan Vikas Nyas through it's Governing Body governs the administration of the CLS within the framework of University Grants Commission, New Delhi and Jiwaji University, Gwalior.

Since the CLS came into existence in 1990 with an ardent intent to impart quality education in the field of Life Sciences and to equip students with knowledge and skills that would enable themselves to make meaningful contribution to self and the society. College offers M. Sc, and Ph. D. programs leading to Masters' and Doctoral degree in Microbiology, Biochemistry and Biotechnology. The College has also started undergraduate courses (B.Sc) in Industrial Microbiology, Biochemistry and Biotechnology in the year 2005. Include the details of new courses taking advantage of Cancer Hospital and Research Institute as sister Institute, College has also opened door to the students who wish to make their carrier in Paramedical subjects. These courses include Medical Laboratory Technology, X-Ray Radiography Technician, Ultrasound and CT-MRI. From the session 2014, College has made efforts to start under graduate courses for the first time in Chanbal Sambhag, they are Bioinformatics, Pharmaceutical Chemistry, Forensic Science, apart from this one new courses in Foods & Nutrition has also been started. Like wise, BPT, Medical record Science & technician courses in OT, Anesthesia, ECG, dialysis have been started by the college.

The College is successful in its aim of making good students in all respects, That is evident from their placement in India and abroad. Many students of the college have also qualified in competitive examinations. The credit goes obviously to the teacher, expert professionals, working with us and the unique facilities being provided by the college. The faculty members of CLS are specialized scientists engaged in various areas of research in various fields of Life Sciences. The

CLS thus has a good spectrum of research expertise encompassing disciplines of cellular, molecular and structural biology. Many students have qualified themselves in examination viz UGC /CSIR-NET, GATE, ICMR etc.

Students are assessed and evaluated throughout the semesters through tests, Seminars, assignments mid semester and end semester examinations regularly etc. Besides, to get the students abreast with the recent advancement in the field of life science, Seminars / Symposium are organized by the college, in which students get opportunity to interact with the experts in the field.



Principal

Executive Summary

College of life sciences was established in 1990, under the banner of “Jan Vikas Nyas”, by its Founder Trustee (FT) Late Shri Shitla Sahai, who has realized the need for education in Microbiology and Biochemistry and started Post graduate degree courses in these subjects, within the premises of Cancer Hospital and Research Institute. Since the CLS came into existence in 1990 with an ardent intent to impart quality education in the field of Life Sciences and to equip students with knowledge and skills that would enable themselves to make meaningful contribution to self and the society. Probably this is the first College in Gwalior and one of the few private colleges in Madhya Pradesh to start these courses, which are of need for the society and for clinical diagnosis of diseases and above all serving the mankind by educating. In 2003, new course, M.Sc. Biotechnology was introduced. Under the able guidance of FT sir, trustee members, governing body members, college has grown both vertically and horizontally. As early as 2005, college has gone for National Accreditation Assessment (NAAC) and got B+ grade.

College of Life Sciences has stood above the rest in its approach to education and its pedagogies. The way we teach and the ways our students learn are unique and creative.

In 1996, College got permanent affiliation from Jiwaji University as affiliated college. In the same year it also recognized under section 12B /2f by UGC, New Delhi.

The College has started undergraduate courses (B.Sc) in Industrial Microbiology, Biochemistry and Biotechnology in the year 2005. Taking advantage of Cancer Hospital and Research Institute as sister Institute, College has also opened door to the students who wish to make their carrier in Paramedical subjects. These courses include Medical Laboratory Technician (DMLT), X-Ray Radiography Technician (D-XRT), Ultrasound and CT-MRI technician. College has shifted to its new building in 2009, built within the CHRI campus.

Like a lamp post, college building on the cancer pahad, appears beautiful lush green trees and hills.

SWOC Analysis of the Institution

Strengths

- Campus Located in the heart of the city
- Environment -friendly campus
- High quality/ job or carrier oriented academic programmes
- Reasonable fee structure, to ensure education is available to all.
- Well-equipped labs and dedicated & qualified staff
- Excellent library facilities
- Zero ragging institute
- Cafeteria for staff and students
- Introduction of innovative techniques in teaching learning and evaluation
- Disburse scholarships to students from SC/ST/ and OBC
- Medical facilities in nominal or no fee to students and staff.
- Utilization of non conventional energy- solar energy
- Full cooperation of the sister institutes under Jan vikas nyas to college in pertaining education, research.
- Society and student holistic development programs
- Well maintained and safe residential facilities for students & staff

Weaknesses

- Limited number of Certificate Courses
- Insufficient student strength in some UG/PG programmes
- Slow progress in identifying funding agencies for research projects
- Insufficient funds

SELF-STUDY REPORT

1. Profile of the College

1. Name and Address of the College

Name	College of Life Sciences	
Address	Cancer Hospital Campus,	
City : Gwalior	Pin : 474009	State :Madhya Pradesh
Website :	www.collegeoflifescience.org	

2. For Communication

Name : **Dr. Meenu Rai**
 Designation : Principal
 Telephone : 0751-2336502/03/04/05 ext 215 (O)
 0751-2342499
 Mobile : 094257 55169
 Fax : 0751-2336506
 Email : principal@collegeoflifescience.org; meenurai58@gmail.com

Name : **Dr. Tejovathi G**
 Designation : Vice Principal & Co-ordinator, Steering Committee
 Telephone : 0751-2336502/03/04/05 ext 215 (O)
 0751-2342499
 Mobile : 09039646493
 Fax : 0751-2336506
 Email : principal@collegeoflifescience.org; teja_gudipati@yahoo.com

Name : **Dr. Archana Shrivastav**
 Designation : Director, IQAC
 Telephone : 0751-2336502/03/04/05 ext 205 (O)
 Mobile : 09425110438
 Fax : 0751-2336506
 Email : archana_61@yahoo.co.in

3. Status of the Institution : Affiliated College

4. Type of Institution

- a. By Gender : Co-education
 b. By Shift : Regular/ DAY
 5. It is a recognized minority institution? : No
 6. Sources of funding : Self-financing
 7. a. Date of establishment of the college : 01/07/1990
 b. University to which the college is affiliated : Jiwaji University
 c. Details of UGC recognition : Enclosed the Certificate as **Annexure I**

S.No.	Under Section	Date of recognition
i.	2 (f)	25/03/1997
ii.	12 (B)	25/03/1997

- d. Details of recognition/approval by statutory/regulatory bodies other than UGC Enclosed the recognition/approval letter as **Annexure II**

Under Section/ clause	Recognition/Approval details Institution/ Department Programme	Year	Validity
2000 (Sr. No.1 year 2001) of Paramedical council, Bhopal	CLS, CHRI campus, temporary permission, BMLT, BPT, CT-MRI, X-ray Radiographer Technician, Ultrasound, Hospital Record Science, Human Nutrition	2013-14 & 2014-15	Ever year validity is renewed after inspection by the Council

8. Does the affiliating university Act provide for conferment of autonomy : No
 (as recognized by the UGC), on its affiliated colleges?
 9. Is the college recognized
 a. by UGC as a College with Potential for Excellence (CPE)? : No
 b. for its performance by any other governmental agency? : No
 10. Location of the campus and area : Urban;,,,,,,,,,,,,,,,,,,,,sq.mts
 11. Facilities available on the campus
 ➤ Auditorium/seminar complex : Auditorium is shared from college's
 with infrastructural facilities : sister Institute Cancer Hospital &
 Research Institute and College's Auditorium

is in the process of construction. College has its own Seminar hall✓

➤ Sports facilities

- ★ play ground : Available
- ★ swimming pool : Not available
- ★ gymnasium : under consideration

➤ Hostel

- ★ Boys' hostel : Dharmshala's rooms from Jan vikas Nyas are provided

- ★ Girls' hostel

- i. Number of hostels : 01

- ii. Number of inmates : 66

- iii. Facilities available

- Round the clock security
 - Visitor's/ Guest room
 - Adequate water and electricity facility
 - Aquagard drinking water facility
 - Mess and dining hall
 - TV Room
 - Round the clock hospital facility

- ★ Working women's hostel : no separate hostel & accommodated in staff quarters is available

- i. Number of inmates : Presently nil

- ii. Facilities

- Round the clock security
 - Visitor's/ Guest room
 - Adequate water and electricity facility
 - Aquagard drinking water facility
 - Mess and dining hall
 - TV Room
 - Round the clock hospital facility

- ★ Residential facilities for teaching : available
and non-teaching staff

- ★ Cafeteria : available

- ★ Health centre : available

First aid, Inpatient, Outpatient, Emergency care facility, Ambulance, Health centre staff, Qualified Nurse – available at college's sister Institutes CHRI & SSIMS

- ★ Facilities like banking (with ATM facility), post office : available

- ★ book shops : not available
- ★ Transport facilities to cater to the needs of students and staff : Yes
- ★ Animal house : No
- ★ Biological waste disposal : Yes
- ★ Generator or other facility for management/ regulation of electricity and voltage : No
- ★ Solid waste management facility : No
- ★ Waste water management : No
- ★ Water harvesting : Proposed
- ★ Green House and Herbal Garden : under construction

12. Details of programmes offered by the college for current academic year

S. No	Program Level	Name of the Course	Duration Year(s)	Entry Qualification	Medium of instruction	Approved Student strength	No. of students admitted
	Ph.D	Microbiology Biochemistry Biotechnology	4	JU Entrance exam	E	8 per guide	
2.	Post-Graduate	Biochemistry	2	graduation	E	25	-
		Microbiology	2	graduation	E	25	06
		Biotechnology	2	graduation	E	25	-
3.	UG Diploma	Medical Lab Technician (DMLT)	2	10+2	E/ H	50	
		Anesthesia Technician		10+2	E / H	50	
		Dialysis Technician	2	10+2	E / H	50	
4.	Under-Graduate B.Sc.	Microbiology	3	10+2	E*/H**	30	
		Biotechnology				30	
		Bioinformatics				40	
		Food & Nutrition				40	
		Forensic Science				40	

		Pharmaceutical Chemistry				40	
		Physiotherapy	4 ½	10+2	E	50	
	Certificate courses	Ultrasound	1	10+2	E/ H	50	
		OT technician	1	10+2	E/ H	50	
		Hospital Record Sciences	1	10+2	E/ H	50	
		CTMRI	1	10+2	E/ H	50	
		ECG Technician	1	10+2	E/ H	50	

*English **Hindi

13. Does the college offer self-financed Programmes? : Yes

If yes, how many? : All

14. New programmes introduced in the college during the last five years if any?

Yes	Number	13
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15. List the departments

Faculty	Departments	UG	PG	Research
Science	Biotechnology	√	√	√
	Microbiology	√	√	√
	Biochemistry	√	√	√
	Forensic Science	√	X	X
	Food and Nutrition	√	X	X
	Pharmaceutical Chemistry	√	X	X
	Bioinformatics	√	X	X

Faculty	Department	Degree	Diploma	Certificate
Science	Physiotherapy	√	X	X
	Bachelor of Medical Lab Technician (BMLT)	√	X	X
	Medical Lab Technician (DMLT)	X	√	X
	Anesthesia Technician	X	√	X
	X-ray Radiography Technician (D-XRT)	X	√	X
	Human Nutrition	X	√	X
	Dialysis Technician	X	√	X
	O.T. Technician	X	X	√
	Hospital Records	X	X	√

	Science			
	E.C.G. Technician	X	X	√
	CT-MRI Technician	X	X	√
	Ultra Sound Technician	X	X	√

16. Number of Programmes offered under

- a. annual system : 12
 b. semester system : 10
 c. trimester system : Nil

17. Number of Programmes with

- a. Choice Based Credit System : Nil (University will start these system from 2016)
 b. Inter/Multidisciplinary Approach : Nil (Do)

18. Does the college offer UG and/or PG program in Teacher Education? : No

19. Does the college offer UG or PG programme in Physical Education? : No

20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty				Non-teaching staff		Technical staff	
	Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University / State Government <i>Recruited</i>	-	-	-	-	--	-	-	-
<i>Yet to recruit</i>	NA							
Sanctioned by the Management	0	03	05	08	09 [#]	01 [#]	04	02
<i>Yet to recruit</i>			07					

*M-Male *F-Female- Part/ full time services provided to CLS under Jan Vikas Nyas

*Staff appointed under Jan vikas Nyas for CHRI, or PGCN or SSIMS give their services to college partially

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	-	02	-	-	01	02	05
M.Phil.	-	-	-	-	-	-	

PG	-	-	-	-	01	02	03
Temporary teachers							
Ph.D.	-	01	-	-	01	-	02
M.Phil.	-	-	-	-	-	-	-
PG					02	05	07
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

22. Number of Visiting Faculty /Guest Faculty engaged with the College : 17

23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	Year 1 2010-11		Year 2 2011-12		Year 3 2012-13		Year 4 2013-14	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	04	-	05	06	02	-	04	-
ST	-	-	03	-	2	-	-	01
OBC	12	12	09	11	19	05	10	04
General	22	47	16	27	13	16	09	08
Others	-	-	-	-	-	-	-	-

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is			-	15	
Students from other states			-	03	
NRI students	-	-	-	-	-
Foreign students	-	-	-	-	-
Total					

25. Dropout rate in UG and PG (average of the last two batches)

UG : 4% PG : 8%

26. Unit Cost of Education (*Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled*)

(a) including the salary component : Rs.13,424.65

(b) excluding the salary component : Rs. 10,547.81

27. Does the college offer any program/s in distance education : No

- mode (DEP)?
28. Provide Teacher-student ratio for each of the programme/ : (17:143) = (1: 8.5)
course offered
29. Is the college applying for : Accreditation Cycle 2
30. Date of accreditation Cycle 1 : 25.05.2005
(Enclosed certificate & peer team report as an **Annexure III**)
31. Number of working days during the last academic year : 185
32. Number of teaching days during the last academic year : 128 (Jan-June,2015)
33. Date of establishment of Internal Quality Assurance Cell (IQAC) : 10.11.2014
34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC
(i) AQAR for 2010-11 on 14.09.2015
(ii) AQAR for 2011-12 on 14.09.2015
(iii) AQAR for 2012-13 on 14.09.2015
(iv) AQAR for 2013-14 on 14.09.2015
35. Any other relevant data (not covered above) the college would like to include: No

2. Criteria - wise Inputs

CRITERION I: CURRICULAR ASPECTS

1.1 Curriculum Planning and Implementation

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

Moto : Vidyanaam Narasya Rupamdhicam

Vision : To serve the humanity by empowering the individuals through education

Mission

- ❖ To grow the institution with sustaining quality by proposing realistic and attainable quality benchmarks for the academic activities
- ❖ To inspire and encourage all who would seek knowledge through higher education and research.
- ❖ To prepare student- teachers to bring in quality in all their endeavors
- ❖ To create supportive and caring environment for staff and students.
- ❖ To improve research and development activities in areas of national priority.
- ❖ To create spirit of enquiry and to develop scientific temperament among student community.
- ❖ To strengthen the academic programs with more careers/job oriented courses to meet the global requirements.
- ❖ To develop health and hygiene, human rights, legal and constitutional awareness among the students
- ❖ To foster patriotism in students and teachers

Objectives

- ❖ To provide opportunities that enhances the interactive learning and developmental effects of students and teachers
- ❖ To provide suitable academic atmosphere for promotion of quality of teaching learning and research by utilizing the College scientific and technical resources.
- ❖ To encourage students and teachers to actively participate in scientific other events.
- ❖ To achieve innovations in teaching learning, research and extension activities.
- ❖ To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programs or projects
- ❖ To initiate the students as well as teachers to organize and participate scientific events in Institution

- ❖ To inculcate social, emotional and intellectual competency in students and teachers through various programs and workshops

The mission & vision of our College are communicated to all the stake holders through -

- Well display in the College premises
- prospectus
- college website (www.collegeoflifescience.org)
- planning and implementation of various activities that are mentioned in the academic calendar / NSS programmes involving the college students council and college sub committees.

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

Before beginning of the academic session (in June), teachers have been given diary to plan syllabus to complete in time. Every month Principal checks the syllabus planned to be finished and signs the diary. Academic committee call meeting and sit together to share syllabus among all subject's faculty so that all of them not get overburdened and also to get syllabus timely finished and time table is prepared accordingly. Where and when necessary, visiting / guest faculty is recruited. Each faculty prepares the study material or notes for their subjects well- in advance. If necessary, chapters / reference papers from books and journals are provided, especially for PG students.

Students have to appear in each class test, which is held regularly, so that regular revision of the subject can be done. Apart from class tests, internals (two), students are given assignments based on the syllabus to each student or in groups. These assignments can be on black board teaching, PPT/OHP presentation, reading reference books in library or preparing at the end of semester feed back is collected from student's for quality of teaching. Apart from all these to cover & prepare for syllabus, an experiment is made that students are also given test with open books.

1.1.3 What type of support (procedural and practical) do the teachers receive (from the institution) for effectively translating the curriculum and improving teaching practices?

- ❖ College gives the list of practicals recommended for each subject / course / semester, which enables the teachers to follow the curriculum for each semester.

- ❖ At the beginning of the session staff as well as academic committee meetings is held to develop effective mechanism to implement the curriculum as well as academic calendar. Distribution of syllabus too.
- ❖ Academic committee frames time table of UG and PG courses.
- ❖ Teachers prepare teacher diary, their work load for week, attendance register. This is regularly monitored by the respective HODs and the Principal.
- ❖ Paramedical courses syllabus is provided by the paramedical courses. Paramedical courses staff from November and other courses is July – August.
- ❖ As per the demand and course requirements visiting / guest / temporary staff are identified.
- ❖ As per requirement- to meet the percentage attendance required (75%) or for improving weaker students performance special classes are taken.
- ❖ For completion of course, staff takes special classes, if necessary.
- ❖ Academic calendar given by M.P. Higher Education and Jiwaji University are taken into consideration for framing college academic calendar. This is modified from time to time modifications as per Jiwaji University notifications

1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other Statutory agency.

- ❖ The institution strictly adheres to the curriculum and academic calendar.
- ❖ Faculty members take special classes for weaker students.
- ❖ On request staff takes revision classes during PL for the benefit of students.
- ❖ Director or his representative / Principal / HOD take note of the day to day functioning and directly staff as and where necessary.

1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?

Industry

Institution interact with industry for updating latest development in products in carry out workshops for the benefit teachers and students institute also calls industries for the direct recruitment.

Research Bodies

Institute also motivates students visit to Industrial and Research Institute to gain practical knowledge.

In collaboration with sister Institute, CHRI practical knowledge of the students is improved by exposing them to clinical sample analysis under the able guidance of expert staff.

College staff members have received financial assistance from various Research Bodies such as UGC/MPCST /DST.

Faculty member and research scholars interact with University Departments for research work and invite them for delivering special lectures to students.

- Dr. Archana Shrivastav – Member Board of Study in Microbiology & RDC
- Dr. G. Tejovathi - Member Board of Study in Biotechnology
- Mrs. Neelima Shrivastava – Member Board of Study in Biochemistry

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University?

Board of Studies member are nominated for 2 years period. Various staff of the college have worked as members in life science stream subject BOS and contributed for designing / modifying the curriculum.

Dr. Archana Shrivastav	– Microbiology
Dr. Meenu Rai	- Biochemistry
Dr. G. Tejovathi	- Biotechnology
Dr. Sunita Bhargava	- Pharmaceutical Chemistry
Mrs. Neelima Shrivastava	– Biochemistry & Food & Nutrition
Mr. Vivek Shrivastava	- Forensic Science

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

Nil

1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

College level committees that are developed, for academics and examination, take note of the academic calendar and conduct internal examinations. Examination committee conducts internals this includes practical viva in all subjects. At the end of 2nd internal parent – teacher meet is

organized to give the performance of the ward to their parents. As both UG and PG are in semester system, continuous comprehensive evaluation of the students is done by class tests, internals, assignment. By the 2nd internal academic committee ensures that the curriculum is completed in time. If necessary special classes are organized. Last semester students of UG (VI Semester and PG IV Semester) go for project training. UG students go for 15-30 days. It can be inhouse. or out side the institute. This is carried out along with course work. While the PG students go for 3-4 months training. Before they leave for training, Syllabus is covered for the theory papers. Assessment of the students for the preparation for university exam is done pre-university internal exam. Principal & HOD ensures that the staff has completed work as per their planning given in the teachers diary.

1.2 Academic Flexibility

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc., offered by the institution.

As per the need of the day- requirements in handling the Medical instruments, skilled persons are required in Health care, hence, the college has initiated various diploma, degree and certificate courses run by paramedical council.

1.2.2 Does the institution offer programmes that facilitate twinning /dual degree? : No

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond:

- ★ Range of Core / Elective options offered by the Higher Education and those opted by the College
09 elective combinations of subjects in UG
- ★ Choice Based Credit System and range of subject options : No
- ★ Courses offered in modular form : No
- ★ Credit transfer and accumulation facility : No
- ★ Lateral and vertical mobility within and across programmes and courses
 - Lateral mobility : No
 - Vertical mobility : Allowed to keep term facility
- ★ Enrichment courses : No

1.2.4 Does the institution offer self-financed programmes? If 'yes', list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

Yes, all the courses offered in the College are self financed. Admission is done by Online registration of the student to Higher Education, thereafter they allotted us according to students' choice. Counseling of the students seeking admission is done. Curriculum and teacher qualification as per Jiwaji University.

Fee structure of the college is decided at governing body of the college, which containing representation from Jiwaji University, trust Jan Vikas Nyas and college staff. No aid is obtained from government organization.

1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.

College has organized training programs on topics like Mushroom cultivation and bonsai plant preparation and r-DNA technology for both students and staff. This helps in the skill development and encourage them for becoming enterpremises.

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice? If 'yes', how does the institution take advantage of such provision for the benefit of students?

No

1.3 Curriculum Enrichment

1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated?

College organized seminar, conferences, guest lectures, practical work related to curricular for supplement the presented curriculum.

1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the

needs of the dynamic employment market?

The College has to follow the curriculum designed by Jiwaji University, M.P. Higher Education and Paramedical Council, Bhopal. Hence college encourages students participation in subject related presentations, discussions, oral presentation, poster presentation is conference, seminars on subject topics of curricular related topics, computer language and internet surfing are basis skills each student is arranged for their personality development.

College takes for advantage of the sister institutions like CHRI in giving practical experience, skill development in student enrolled in courses such as BPT, DMLT, X-ray, CT-MRI, Ultra Sound etc. The theoretical and practical knowledge is gained from the expert doctors and technicians working at CHRI by students of paramedical courses. They learn handling the instruments practically. The PG course students utilize clinical sample for pathological, biochemical related curricular practicals. This increases their employment opportunities.

The training programme and Ph.D. topic are also chosen many clinical related problems, so that the students can undertake carriers R&D in lab & organization related to diagnosis.

At the end of each even Semester college takes students feed back and the only outcomes are presented in staff meetings and meeting for action taking to improve the quality of education.

1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

Moral values, entrepreneurship development, environment aspects and basic computer knowledge are part of foundation course in UG curricular. Society related awareness activities and environment protection and empowerment related activities the objectives of the college, are implemented in organized activities of NSS programs Eco- club and cyber-club.

At college level as well as in collaboration with sister institutes, College of Life Sciences has successfully able to implement activity related to community society.

Some of them include –

- Tobacco ban law complain in no tobacco day.
- Cancer awareness programs.
- AIDS awareness society especially youth by presentation, model competition under red ribbon club.
- Free heart check up

- Blood donation camp
- Environment protection
- Water harvesting
- Solar energy utilization
- Employable and life skills
- All the courses run by College of Life Sciences are employ skills

1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

§ moral and ethical values

Moral and ethical values are taught in FC course. Various activities of the college engage students to learn and implement moral and ethical values. For example. NSS Campus for a week

§ employable and life skills for All courses

§ better career options

Most of the courses offered by college are carrier oriented. Example: M.Sc. Microbiology, Biotechnology, Biochemistry, B.Sc courses with Microbiology, Biotechnology, Forensic Science, Food and Nutrition, Pharmaceutical Chemistry

§ community orientation

College has NSS, Eco club. Some students are also encouraged for their NCC in other institutes. College and its sister institutes, collectively organize number of activities for the society development.

1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?

Suggestions given by the students in the feed back are communicated to the members of BOS , in Jiwaji University.

1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

Subject teacher, HOD of each department and the academic committee evaluates the performance of the students. Needs some improvement

1.4 Feedback System

1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

Subject related to self financed courses , curriculum is developed by Borad of of Studies in that

subject. Some of the staff of this college are members of BOS. Staff who are involved in the design and development of curriculum are-

Dr. Archana Srivastav	: Microbiology
Dr. Tejovathi	: Biotechnology
Mrs. Neelima Srivastav	: Biochemistry, Food and Nutrition
Mr. Vivek Srivastav	: Forensic science
Dr. Sunita Bhargav	: Pharmaceutical chemistry.

1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

Yes: The College regularly seeks feedback from students on the prescribed proforma provided by IQAC. parents views are sought in the parents-teachers meetings. Alumni are regularly invited and their advices and comments are taken into consideration in formulating policy. Members of management, college Governing Body also provides their valuable suggestions on changing/ introducing new courses.

1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?)

13 courses

1. B.Sc. With Forensic Science special Paper
2. B.Sc. with Food and Nutrition special Paper
3. B.Sc. with Pharmaceutical Chemistry special Paper
4. B.Sc. Bioinformatics special Paper
5. Bachelor of Physiotherapy (BPT)
6. Bachelor of Medical Lab Technician (BMLT)
7. Anesthesia Technician (Diploma)
8. X-ray Radiography Technician (D-XRT) (Diploma)
9. Human Nutrition (Diploma)
10. Dialysis Technician (Diploma)
11. O.T. Technician (certificate)
12. Hospital Records Science (certificate)
13. E.C.G. Technician (certificate)

This one of our college mission is to create job oriented courses according to the global requirements. Global With increasing knowledge in the medical sciences, development of modern equipment and lack of skilled technician, college and the trust have selected these

programmes.

Any other relevant information regarding curricular aspects which the college would like to include : No

CRITERION II: TEACHING - LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

2.1.1 How does the college ensure publicity and transparency in the admission process?

Publicity of the college and courses offered is done using electronic media, Hoardings in and around Gwalior and Chambal Sambhag, advertisement in News papers, FM radio Scrolls, pamphlet distributions, Participating in Career fairs and also by mouth to mouth and telephonic mode of advertisement. Publicized even on the college web site www.collegeoflifescience.org

Admissions are highly transparent. No direct admission is done any courses run by Jiwaji University. Admissions in the college are highly transparent. It is done online at MP Higher Education Portal. Details of the college/ course/ fee structure/ subject combination are given in the portal as well as in the college prospectors.

Paramedical courses admissions completes by November every year. It is by direct admissions process. The details of admission process, fee structure and other details are clearly given in the prospectors.

2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

Admissions are done on the basis of merit in all courses, again this process is done on line at portal itself B.Sc. and M.Sc. Courses affiliated to Jiwaji University. While for paramedical courses, admissions are done directly on Merit basis.

2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

Minimum passing marks for admission into any course, as per MP higher education, Paramedical Council Bhopal and Jiwaji University. 5% relaxation is given under SC/ST/OBC category students. This is followed by all the colleges affiliated to Jiwaji University.

2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?

Admissions up to the academic year 2010-11, direct admissions at college level were carried out and the detailed process is given in the prospectors. Thereafter, from year 2011-12, the admissions are done through M.P. Higher Education online admission portal. This follows a strict time bound programme that ends by mid of August. Instructions are clear on portal. No admission there after can be entertained.

The positive outcome is that, admissions are completed in time and are transparent.

The negative aspect is that, as most of the students, deprived or unaware of the starting of on line admissions, lack of knowledge on admission process, choosing process, especially deadlines, loose chance of getting admitted. Students, who could not enroll on line in time, can not take admission for that academic year. This probably is one reason for the decrease in the admissions.

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion

Reservation norms are followed as per the MP Higher education are as follows-

* SC/ST	: 16%/20%
* OBC	: 14%
* Women	: 30% in each category
* Differently abled	: 3%
* with NCC /NSS certificate 'C'	: 1%
* ward of Freedom Fighters/ Ex-servicemen/Armed Forces	: 3%

2.1.6 Provide the following details for various programs offered by the institution during the last four years and comment on the trends.

Program	Year	Number of applications	Number of students admitted
UG- B.Sc.	2012	16	13
	2013	07	07
	2014	62	60
	2015	41	39
PG- Biotechnology	2012	07	07
	2013	01	01
	2014	02	02
	2015	-	-
PG- Microbiology	2012	08	07
	2013	05	04
	2014	06	04
	2015	07	07
Paramedical courses	2012	38	38
	2013	23	23
	2014	81	81
	2015	In progress	

2.2 Catering to Student Diversity

2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard? Percent of total seats are reserved for differently-abled students. It is clearly mentioned in the college prospectors.

Dr. Madhu Gupta convener of Admission Committee under, keeps note of the differently-abled students to address their needs during the admission and Mrs. Usha Duseja convener of the academic committee addresses the need of such students during and also take care of the problems. So far impaired students have not taken admission in the college. However, reservation for admission has proposed as per the Higher Education.

2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

College admission committee consists of staff from various streams and they counsel individual

student at the time of admission. They give the information about the different choices available in the college. They also analyze the student efficiency and ability and financial conditions and suggest the course and subject combinations suit for the individual.

All the details of the courses, subject combinations, number of seats available in each combination are given both in the prospectors and the web site of the college in the MP Higher Education On line admission portal.

The college has allotted a class in time table of each class for Library and Computer lab. During these periods, students are taught to use computer and also using various software such as Excel, MS word, Power Point, internet surfing.

College has specially cyber club, members of this club develop PPTs and do data bases for different subjects.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/ Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

All the courses run in the college of life sciences are professional courses. Especially these are of Life Sciences. Hence, each course is linked with on another and needs addressing students about knowledge gaps before and also where ever is necessary during the curriculum.

For example, in UG and PG courses, subject Cell biology requires knowledge of Biochemistry. Concern teacher will give structure and chemical bonds and other aspect to students.

Special extra classes for weaker students are taken.

Book bank is present in the college for SC, ST and OBC students. Students get issued books of their choice, according to course for that complete semester.

As the courses run by the institution are professional courses, directly or indirectly students are involved in various programmes as anchors, organizing members to develop their personality.

2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

College of Life Sciences, along with its sister institutes, CHRI, PGCN, SSIMS organizes various programmes and related to gender, inclusions and Environment. College has taken up the slogan of the state, Beti bahav and beti padhav and organized programs on Save girl child.

Recently we have organized a National conference on Forensic science in crime against women. During this conference, experts from law, medicine, NGO organizations, colleges and students have participated. College and its sister institutes working under the umbrella of Jan Vikas Nyas trust Take environment protection as one of the priority in their agenda. This is their part in serving the society. Every year tree plantation is done in and around the college and CHRI campus.

A unique place known as Pitru Parvath has been developed to encourage the citizens to plant trees in this hill in the memory of their beloved ones. College has adhered to “green campus and clean campus”. College staff and students participate in programmes such as for plantation of trees in the campus, swatch Bharath Abhiyan, Polythene free campus, save birds.

College has Eco- Club, under the guidance of Dr. Archana Srivastav, Coordinator and Dr. Madhu Gupta, convener, the members of the club have organized events related to protect environment. Students of NSS and ECO club have taken the oath to maintain the college campus as “green campus and clean campus” and “Polythene free campus”. They also taken up Gajar Ghas nirmolan Abhiyan too. They celebrated Shram day, environment day. IQAC committee also very keenly takes note of this aspect and gives suggestions where ever required. College has organized world population day, literary day, run for Unity, poster completion for Unity

2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?

As the courses run by the college are advanced / special subjects and lot of developments are seen at national and international level, college provides students with computer lab with internet facility to surf for latest development in the subject. Staff provides advanced study material apart from the material present in the specified course books (especially UG students, Unified Books). Staff develops PPT or e-books data base that is available in the library for the advance references for students

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?

The college fee structure for various courses are nominal. Admission for some sections of

students is done only on scholarship bases. For slow learners, college takes written exams after each unit in each subject to improve learning power, time management in exams and also writing habit. Special classes and distribution of notes is also part out efforts. Class teacher , also counsels the student and encourages them for education.

2.3 Teaching-Learning Process

2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

College Academic committee prepare Academic calendar, from 1st July to 30 June of each year, taking in to consideration of Jiwaji University and MP higher education academic calendars. College has its own Teacher's diary; each teacher gives details of their classes, plan of week, month. Students evaluation is done in two internal examinations as well as in class tests.

2.3.2 How does IQAC contribute to improve the teaching – learning process?

IQAC committee is effective for two years. A constant monitoring of teaching – learning process is done by respective faculty in their subjects and academic and examination committees monitor smooth implementation of the academic calendar.

IQAC committee regularly encourages with various suggestions for improving teaching learning processes. Evaluate the academic and other activities and give suggestions for both students and teachers to improve teaching and the performance of the students.

2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

Teaching and learning in the college is completely Student- centric. Day to day teaching includes discussion while teaching. Traditional black board teaching and also explanations by students on board within the class, reading of the text book during the class. Students are encouraged for project presentation in PPT.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

- Presentations on given topics.

- Ex-tempo oral presentation on given topic in various activities.
- Presentation of their views in the form of models and posters.
- Wall paper competition
- Organizational skill by giving responsibilities of anchoring during various programmes.
- Planning and implementation of events in eco-club and cyber club.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

College has computer lab with internet. staff lecture presentations, Subject related presentations are also available.

2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills

Staff and students are encouraged to participate in seminars, workshops and to attend expert lectures delivered within and outside the institute for enhancing their knowledge. Staff also encouraged presenting latest developments in their field using ICT information technology.

2.3.7 Detail (process and the number of students benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/ mentoring/ academic advise) provided to students?

Members of Admission committee council the students at the time of admission. They give information on courses, subjects and combinations that are run in the college and guide them. Class teacher monitors the students of class and provides all possible guidance, it can be on academic, personal or other issues.

2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

Power Point Presentations, OHP Presentation, demonstrations, audio and visual mode of explanations. Documentaries are shown to the students to give virtual explanation of any topic.

2.3.9 How are library resources used to augment the teaching- learning process?

Library has good reference books, e- books and PPTs that are used by the staff for adding the new information to their teaching and in giving latest information to the students.

2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.

The college completes its curriculum within the timeframe despite following challenges.

1. Delay in the declaration of results by the affiliating University.
2. Frequent re-scheduling of the exam time-table by the University.
3. Exams of one program and classes of the other are simultaneously conducted.

It is very challenging for the faculty to co-ordinate teaching schedule with examination duty. Some times, Yes. When there is delay in the admission schedule or delay in examinations of previous semester due to rescheduling of affiliated University, over lapping of exams of one semester with the teaching session of another course, lack of proper timely information on the modifications in the syllabus are some of the major hurdles.

Then the college academic committee reschedules academic calendar for the effected classes. It also ensures that the staff takes special classes and efforts in smooth completion of curriculum. Staff helps students by giving study material and to prepare for the exams.

2.3.11 How does the institute monitor and evaluate the quality of teaching learning?

Examination committee, under the supervision of principal organizes internal exams and the results are shared with parents in parent teacher's meetings. Each staff gives information about the performance of the ward to their parents. Principal monitors teaching of staff by teacher's diary. IQAC Director of the college and the principal constantly monitor and advice , where ever necessary.

2.4 Teacher Quality

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human

resource (qualified and competent teachers) to meet the changing requirements of the curriculum

Highest qualification	Professor		Assistant Professor		Total
Permanent teachers	Male	Female	Male	Female	
D. Sc./ D. Litt	-	-	-	-	-
Ph.D	-	01	01	03	05
M. Phil	-	-	-	-	-
PG	-	-	01	01	02
Temporary teachers					
D. Sc.	-	-	-	-	-
Ph.D	-	01	03	06	10

2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)?

Growing demand/ scarcity of faculty for teaching new programmes and modern areas such as forensic science, food and nutrition are met by interdisciplinary teaching, by inviting guest faculty and organizing seminar, conferences.

2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

a) Nomination to staff development programmes

Academic Staff Development Programmes	Number of faculty nominated
Refresher courses	-
HRD programmes	-
Orientation programmes	-

Staff training conducted by the university	-
Staff training conducted by other institutions	01
Summer / winter schools, workshops, etc.	01

- b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning

No

- **Invited lectures of the faculty in Workshops / Seminars / Conferences organized by external professional agencies**

Dr.Archana Shrivastav

- Chaired session in National Symposium on Frontiers in Biochemistry and Biotechnology held on 16th, 17th March 2012 at Jiwaji University Gwalior MP

Dr. Tejovathi Gudipati

- Invited lecture on “Application of Molecular Markers in the identification of genetic variations in the plants” in **2nd National Women Conference; Women in Science- Promoting Excellence and Innovation for Future Development**. Organized by Jiwaji University, Gwalior during March, 25-27, 2015.
- Invited talk on “Plant tissue culture: an alternative approach for conservation of medicinal plants” in **National conference on Research Trends in Environmental Science** organized by IGAEERE, Jiwaji University, Gwalior.
- Invited lecture on “*In vitro* techniques for the..... *Bacopamonnieri*” in **National Conference on New Forntiers for Women in Science and Technology**. Organized by Jiwaji University, Gwalior during March, 20-21, 2013.
- Invited talk on “In vitro production of Bioactive molecule and validation for pharmaceutical applications” in **DAE- BRNS life Science Symposium 2012on trends in plant, agriculture and food science**. Organized by Biomedical Group, BARC, Mumbai.
- Invited talk on “Significance of *in vitro* techniques in the conservations of *Bacopamonnieri* and production of bacosides.” In **National conference on Chemistry, Biochemistry and Ayurveda of Indian medicinal plants**. organized by MGCGB Chitrakoot, M.P. on April 2013.
- Invited lecture on “Two decades of in vitro studies in Safflower” in **National Symposium on Perspectives of Genomics and Proteomics**. Organized by Osmania University, Hyd, 2009.

Dr. Madhu Gupta

- Delivered lecture and five day practical training on “Mushroom Cultivation” at Govt.

Autonomus Kamla Raja Girls College, Kampoo, Lashkar, Gwalior from **12-16 March, 2012.**

- Delivered lecture and Hands on training“using of agro residues for the cultivation of edible mushrooms” at Vidyavathi College, Bhind, MP 28th October, **2012.**
- Delivered lecture and training“wheat straw suitable for the production of oyester mushroom” at Vidyavathi College, Bhind, MP 25th-26th May, **2013.**

Dr. Sunita Bhargava

- Delivered lecture and practicals on chemical bonds in ‘DST inspire workshop’ held at Moolji Jaitha College, Jalgon , in March 2015.

❖ **participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies**

Dr.Archana Shrivastav

- NAAC awareness work shop on “Assessment and accreditation IQAC” held at Jiwaji University, Gwalior, 22-23, March 2015

Dr. Tejovathi Gudipati

1. 2nd National Women Conference; Women in Science- Promoting Excellence and Innovation for Future Development. Organized by Jiwaji University, Gwalior during March, 25-27, 2015.
 - a) Pratibha Goyal, Vivek Shrivastava, Archana Shrivastava and Tejovathi Gudipati. Evaluation of antifungal property of *Tamarindus indica* and *Butea monosperma* aerial parts against four different strains of *Candida*.
 - b) Neha Gupta, Tejovathi Gudipati, Surendra Kitchloo, A.P. Gupta and Rekha Bhadauria. *In vitro* accumulation of Stevioside and Rebaudioside- A in callus culture; Role of Growth Regulators, Nitrate and Sugars.
 - c) Sadhna Chaturvedi, Tejovathi Gudipati, Usha Duseja, Archana Shrivastava. The use of Rhizobacteria reduces the harmful effect of salinity on cowpea plant.
2. Nation Conference on Research Trends in Environmental Science. Organized by IGAEERE Jiwaji University, Gwalior during February 4-5, 2014.
 - a) Sadhna Chaturvedi, Tejovathi Gudipati and Archana Shrivastava, role of rhizobacteria on salinity stressed plants: A review.
 - b) Neha Gupta, Tejovathi Gudipati and Rekha Bhadauria, *In vitro* callusing: an alternative approach for production of zero calories steviol glycosides.
3. National Conference on New Frontiers for Women in Science and Technology. Organized by Jiwaji University, Gwalior during March, 20-21, 2013.
 - a) Gupta Neha, Jha Devendra and Tejovathi Gudipati. Hepatoprotective polyherbal formulations and functions of major ingredient bioactive molecules.

- 4) National Seminar on Antioxidants in Aging , Health and Diseases held on 08 April. 2015 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- 5) National Conference on Role of Forensic in Crime Against Women (RFSCAW CON-2015) held on 25 April, 2015 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- 6) DST –NASI Workshop on Sensitization of Women Regarding S& T Fellowships and Internships held on 22 May, 2015 at Jiwaji University Gwalior (M.P.)
- 7) NAAC awareness work shop on “ Assessment and accreditation IQAC” held at Jiwaji University, Gwalior, 22-23, March 2015

Dr. Madhu Gupta

- Training received in “Identification of gaps in knowledge about forest and other plant resources of M.P.” at Institute Of Ethnobiology, Society Of Bionaturalists & School Of Studies In Botany, Jiwaji University, **Gwalior** held during **23 -24, March, 2011**.
- Training received in “Cultivation of Mushroom” at Mushroom World Ayurved & Food Pvt. Ltd. Bhopal Held during **16, May, 2010**.
- Training received in “All about PCR and its Trouble Shootings Techniques” at College Of Life Sciences, **Gwalior** Held during **2-4, December, 2011**
- Training received in “Identification, Documentation, Conservation, of Medicinal and threatened plant species and Related Ethnobiological Aspects’ at Institute Of Ethnobiology, & School Of Studies In Botany, Jiwaji University, **Gwalior** held during **22 -24, December, 2011**.
- Training received in “Mushroom as a cheap food supplement” in National Workshop on Chemistry and Environment at Department of Chemistry, Career College, Bhopal, In collaboration with ISCA, **Bhopal** Chapter held during **28- 29, April, 2012**.
- **One week** Hands on Training received on “In Silico tools and techniques in Bioinformatics’at Department of Botany and Zoology, Kamla Raja Girls Autonomous Post Graduate College Gwalior (M.P.) held during **25-30, September 2014**.
- **Two week** Hands on Training received on “**Environmental Studies** ’organized by IIT, Bombay at MITS, Gwalior (M.P.) held during **2 -10 June 2014**.
- National Seminar on Antioxidants in Aging , Health and Diseases held on 08 April. 2015 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- National Conference on Role of Forensic in Crime Against Women (RFSCAW CON-2015) held on 25 April, 2015 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)

Dr.Sunita Bhargava

- training program in Defence Research and Development Establishment (DRDE) Gwalior M.P on **“Water Analysis and Instrumentation”**.
- participated and presented paper in the National seminar on **“Biodiversity-Environmental Interplay”** held at Govt. Science and Commerce College Benezir, Bhopal M.P. from 14th to 15th Feb. 09
- participated and presented paper in the National conference on **“Biodiversity and conservation”** held at Jiwaji university Gwalior from 4th Dec. to 5th Dec.2010.
- participated and presented paper in National Seminar on **Frontier in Environment Research (FIER 2012) Interdisciplinary** held in S.L.P. College Gwalior M.P from 18-19 Feb 2012.
- participated and presented paper in National Seminar on **“Environmental and Human welfare”** in Maharaja Chatrasal College, Chattarpur M.P from 18 & 19 March 2012.
- participated and presented paper in National Conference **“Emerging Trends in Research and Analysis for sustainable Development”** held in Madhav Science P.G.College ,Ujjain M.P from 27-28 March 2012. .
- participated and presented paper in National Seminar on **“Recent Trends in Environmental Sciences”** held in Gwalior Engineering College, Gwalior M.P., on 22 April 2012.
- participated presented paper in 4th National Seminar on **“Recent Approaches in Environmental Sciences”** held in NRI College of Engineering and Management, Gwalior M.P.,on 5th June 2012.
- I have participated and presented paper in National Conference **“Recent Advances in Chemical Sciences Emphasis on Healthy Life”** held at ITM University Gwalior M.P. from 21 to 22 Sep 2012.
- participated and presented paper Seminar on **“Water Mangement Technologies”** organized by Amity University Gwalior M.P. on 12th October 2012.
- participated and presented paper in National Conference on **“Emerging Trends in Basic Sciences”** held at Nagaji Institute Of Technology &Management, Gwalior M.P. from 29 to 30 Dec 2012.
- participated National Seminar on **“Computer Assisted Drug Designing And Green Chemistry”** held at Deptt of Chemistry Career College Bhopal M.P. From 19-20 Jan.2013
- participated and presented paper Seminar on **“Chemistry in Day to Day Life”** held at Deptt of Chemistry K.R.G College Gwalior M.P. on16 Feb .2013
- participated and presented Poster3rd National Conference on **INVENTIONS IN INDIAN SCIENCE ,ENGINEERING AND TECHNOLOGY** National Physical Laboratory NPL Delhi from 25-27 Feb 2013.
- participated and presented Poster National Conference on **“Human papillovirus and Control of Cervical Cancer Current Scenario”** in College of Life Sciences, Cancer Hospital & Research Institute Campus Gwalior M.P and from 16-17 March 2013.
- participated and presented National Conference on **‘Greener Technologies For Detection And Treatment Of Pharmaceuticals’** in held in School of Studies of Environmental Chemistry from 22 & 23March. 2013 Jiwaji University, Gwalior M.P.
- participated and presented paper in National Seminar on **“Recent Trends in Environmental Engineering”** held in NRI College of Engineering and Management, Gwalior M.P., on 9th April 2013.
- participated National Seminar on **“INNOVATIVE AND EMERGING TRENDS IN INFORMATION TECHNOLOGY”** held at Career College Bhopal M.P. From 27-28Sep.2013

- participated and presented paper in National Seminar on **“CHEMISTRY AND APPLIED SCIENCES FOR SUSTAINABLE DEVELOPMENT”** held in SLP College, Gwalior M.P., from 15-16 February, 2014.
- participated and presented paper National Seminar on **“ RECENT TRENDS IN CHEMICAL SCIENCES”** held in Govt. Postgraduate College (Autonomous), Datia (M.P.), from 21-22nd February, 2014.
- participated and presented paper in National Seminar on **“Biodiversity: Assessment Utilization and Conservation ”** held in Maharaja Mansigh College, Gwalior M.P., from 22-23rd February, 2014.
- participated and presented paper in 2nd National Women Conference 2015 on **“Women In Science- Promoting Excellence And Innovation For Future Development ”** March 25 to 27 2015 organized by Jiwaji University Gwalior.
- I have participated and presented paper in National conference on **“ Role of Nanomaterial For Various Application In Chemistry : and eco friendly approach”** held at 6th to 8th April SOS Chemistry from Jiwaji University Gwalior.
- participated and presented Poster National Seminar on **“Antioxisem 2015”** in College of Life Sciences, Cancer Hospital & Research Institute Campus Gwalior M.P. on 8th April 2015.
- participated and presented Poster National Seminar on **“Role of Forensic Science Crime Against Women”** in College of Life Sciences, Cancer Hospital & Research Institute Campus Gwalior M.P. on 25th April 2015.

Dr. Abhinav Shrivastava

- Paper presented in National seminar on “Role of Human Papiloma Virus in cervical cancer” held on Cancer Hospital and Research Institute on 15-16 March, 2013.
- Participated in International seminar on biodiversity organized by Department of Zoology, Jiwaji University, Gwalior.
- Participated in International seminar on Climatic changes in global environment
- organized by IASCA, ITM Universe, Gwalior .
- Participated in National seminar on Recent Advances in Environmental Sciences,
- IASCA, ITM Universe, Gwalior and presented a poster titled “Medical Waste Disposal System: An integral part of Hospital”.
- Participated in National conference on Food 2020 at Centre for food Technology Jiwaji University, Gwalior and presented a poster titled “*Food as a vaccine*”.

Dr. Santosh Yaduvamshi

1. Faculty recharge programme in Computational Biology, held on Jiwaji University, 21, Sep -26 Sep, 2015.
2. Executive member of ANTIOXISEM-2015 National Seminar on Antioxidants in Aging, Health and Diseases: Department of Food and Nutrition, College of Life Sciences, Cancer Hospital Campus, Gwalior 08 April, 2015 pp42.

3. Executive member of RFSCAWCON-2015 National Conference on Role of Forensic Science in Crime Against Women. Department of Forensic Science, College of Life Sciences, Cancer Hospital Campus, Gwalior 25 April, 2015.
4. 30th Annual Conference of Society of Toxicology (STOX), India and Symposium on Strategies for Safety Study Requirement for Herbal Formulations. Jamia Hamdard (Hamdard University), New Delhi, Dec 9-11, 2010.
5. 28th Annual Conference of Society of Toxicology (STOX), India and International Symposium on Monitoring and Modulating Global Resources of Environmental and Food Contaminants; Nature versus Chemicals at Department of Phycology and Toxicology, Ludhiana, 16-18 Oct, 2008.
6. 27th Annual Conference of Society of Toxicology (STOX), India & International Workshop on Toxicology towards Diplomate of American Board of Toxicology (DABT). At Veterinary College, Hebbal, Bangalore, 6 & 7 Oct, 2007.
7. 26th annual meeting of Society of Toxicology (STOX) India at SOS in Zoology, Jiwaji University, Gwalior, 9-11 Oct, 2006.

Mrs Neelima Shrivastava

1. Executive member of ANTIOXISEM-2015 National Seminar on Antioxidants in Aging, Health and Diseases: Department of Food and Nutrition, College of Life Sciences, Cancer Hospital Campus, Gwalior 08 April, 2015 pp42.
2. Executive member of RFSCAWCON-2015 National Conference on Role of Forensic Science in Crime Against Women. Department of Forensic Science, College of Life Sciences, Cancer Hospital Campus, Gwalior 25 April, 2015.
3. Executive member of a National Seminar on "Impact of ICT in libraries" (3-4th nov. 2012) Sponsored by UGC Bhopal Organized by College of Life Sciences
4. Executive member of a National conference on "HPVCON (March, 2013) Sponsored by MPCST Bhopal Organized by College of Life Sciences.
5. 38th Annual conference of ACBI on "Advances in laboratory medicine towards molecular diagnostics" held on 2nd, Dec 2011.
6. Faculty development program hands on training in molecular biology techniques, May, 2011 (Helix Biomolecules).
7. Hands on Training and Exhibition on "Bonsai Cultivation and Care" held on 18th Sep .2014 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
8. 2nd National Women Conference -2015 held on 25-27, March 2015 at Jiwaji University Gwalior (M.P.)
9. International conference on health yoga and medicine at LNIPE Gwalior, Feb 2008.

10. International conference on Climate Change and Sustainable management of natural resources, ITM University, Nov 2011.
11. Seminar on Biodiversity Jiwaji University, Dec 2010.
12. Seminar on NAOTECH, College of life Sciences, Feb 2008.
13. Seminar on Recent trends in Molecular Biology, College of life Sciences, 28 Feb, 2006.
14. Seminar on How to write a research Paper, Sep 2006.

Mr. Nishant Sharma

1. Executive member of ANTIOXISEM-2015 National Seminar on Antioxidants in Aging, Health and Diseases: Department of Food and Nutrition, College of Life Sciences, Cancer Hospital Campus, Gwalior 08 April, 2015 pp42.
2. Executive member of RFSCAWCON-2015 National Conference on Role of Forensic Science in Crime Against Women. Department of Forensic Science, College of Life Sciences, Cancer Hospital Campus, Gwalior 25 April, 2015.
3. Executive member of a National Seminar on "Impact of ICT in libraries" (3-4th nov. 2012) Sponsored by UGC Bhopal Organized by College of Life Sciences
4. Executive member of a National conference on "HPVCON (March, 2013) Sponsored by MPCST Bhopal Organized by College of Life Sciences.
5. Faculty development program hands on training in molecular biology techniques, May, 2011 (Helini Biomolecules).
6. Hands on Training and Exhibition on "Bonsai Cultivation and Care" held on 18th Sep .2014 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)

Mrs. Usha Duseja

- National Seminar on Frontiers in Environmental Research (Inter Disciplinary) held on 18th, 19th Feb. 2012 at Govt. S.L.P. College Gwalior.(M.P.)
- National Research Seminar on Water Conservation & Management held on March 03rd – 04th 2012 at M.L.B. Govt. College of Excellence, Gwalior (M.P.)
- National Symposium on Frontiers in Biochemistry and Biotechnology held on 16th, 17th March 2012 at Jiwaji University Gwalior (M.P.)
- National Conference on Human papillomavirus and Control of Cervical Cancer – Current Scenario, held on 16-17th March 2013 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- National Conference on New Frontiers for Women in Science and Technology held on March 20-21, 2013 at Jiwaji University, Gwalior (M.P.)
- M.P. State Conference & Scientific Seminar held on 12th jan.2014 M.G.M. Medical College, Indore (M.P.)

- Hands on Training and Exhibition on “Bonsai Cultivation and Care” held on 18th Sep .2014 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- 40th All India Conference and Scientific Seminar (AIMLTA MEDILAB CON-2014) held on 29th -30th Dec 2014 at AIIMS New Delhi.
- 2nd National Women Conference -2015 held on 25-27, March 2015 at Jiwaji University Gwalior (M.P.)
- National Seminar on Antioxidants in Aging , Health and Diseases held on 08 April. 2015 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- National Conference on Role of Forensic in Crime Against Women (RFSCAW CON-2015) held on 25 April, 2015 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- DST –NASI Workshop on Sensitization of Women Regarding S& T Fellowships and Internships held on 22 May, 2015 at Jiwaji University Gwalior (M.P.)
- Five weeks training of “DRDE” Gwalior in the department of Virology under Dr. A.M. Jana (Sci.“E”) H.O.D. Virology Division, learned various technique like Tissue Culture, ELISA (Enzyme Linked Immuno Sorbent Assay), SDS-PAGE & Western blotting , Animal handling , Antigen preparation , Hybridoma technique.
- Six months training of “College of Life Sciences”, Gwalior in the department of Biochemistry under Dr. Meenu Rai H.O.D. Biochemistry division learned various technique like handling of autoanalyzer named RA-50, RIA (Radio Immuno Assay) and IRMA, Haematological investigation and serological tests Routine clinical Biochemistry and one course in Microbiology.
- Faculty development programme attended in Hands on training in “Basic techniques in Recombinant DNA Technology “jointly organized by College of Life Sciences, Gwalior & Helini Biomolecules, Chennai during 29th April to 01st May 2011.
- National Research Seminar on Water Conservation & Management held on March 03rd – 04th 2012 at M.L.B. Govt. College of Excellence, Gwalior (M.P.)
- National Symposium on Frontiers in Biochemistry and Biotechnology held on 16th, 17th March 2012 at Jiwaji University Gwalior (M.P.)
- National Conference on New Frontiers for Women in Science and Technology held on March 20-21, 2013 at Jiwaji University, Gwalior (M.P.)
- M.P. State Conference & Scientific Seminar held on 12th Jan.2014 M.G.M. Medical College, Indore (M.P.)
- Hands on Training and Exhibition on “Bonsai Cultivation and Care” held on 18th Sep .2014 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- 40th All India Conference and Scientific Seminar (AIMLTA MEDILAB CON-2014) held on 29th -30th Dec 2014 at AIIMS New Delhi.

- 2nd National Women Conference -2015 held on 25-27, March 2015 at Jiwaji University Gwalior (M.P.)
- National Seminar on Antioxidants in Aging , Health and Diseases held on 08 April. 2015 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)
- National Conference on Role of Forensic in Crime Against Women (RFSCAW CON-2015) held on 25 April, 2015 at College of Life Sciences, Cancer Hospital & Research Institute Campus , Gwalior (M.P.)

➤ **Faculty presented papers in Workshops / Seminars / Conferences**

Details are provided in the above point

2.4.4 What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)

The policy of the college administration is to encourage and support teachers in enhancing their academic competence. 08 teachers have received grants for research projects. The college supports staffs in pursuing higher studies (Ph.D.). 04 Staff members have done their Ph. D while on job. Lab facilities, computer and internet facilities Faculty members of the college provide research guidance for dissertation students coming to college for project trainings from other institutions.

2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.

Dr.Meenu Rai received best teachers award.

2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes, the students of the college give their feedback about the teachers and their teaching skills on the prescribed proforma provided by the IQAC. The inputs given by the students are used for quality enhancement.

2.5 Evaluation Process and Reforms

2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

The college gives full details of- academic calendar of the session, internal examinations, semester examinations, question paper, marks distribution pattern, to the students during the orientation program. Examination committee takes care of these processes. The internal examination schedules are displayed on noticed board well in advance. Students are informed in the classes too. The class tests are announced in the class by individual teacher.

Institution conducts parent teacher meet after 2nd internal examination in each semester. Parents are informed well in advance through their wards. Parents discuss with each subject staff and learn about the performance of their ward. Suggestions of parents are taken in writing.

2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

The affiliating University and the Department of Higher Education has introduced semester system. The college strictly follows all the instructions received from the University and the Government from time to time regarding the evaluation reforms. In the internal examinations, college has adopted coding system since last year.

2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

Being an affiliated college, institution has to follow the rules laid by the Affiliating Jiwaji university and the Department of Higher Education. Final semester paper settings, paper evaluation, declaration of results are strictly under the control of affiliating University.

2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.

To measure students' achievements in academic and co-curricular activities, following formative and summative evaluation approaches are adopted by the Institution:

Academics – As per M.P. State Higher Education Department, college academic calendar, internals (two) are conducted in each subject/ Semester, including practicals. 15% of total

semester marks for each subject are included in the final marks. Special test, if necessary, is organized for the students who cannot appear in due time and also for students who want to avail chance to improve their performance in internals.

Co-curricular activities – The college organizes cultural and sports events every year to encourage students to take part in co curricular activities. Students participate in such as extempore debate, quiz, poster, rangoli, dance, music etc. Best students are awarded prizes and certificates.

2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students.

To ensure transparency in internal examination, non biased evaluation, institution has adopted coding of answer sheets. Examination committee codes and decodes marks sheets, compiles and displays the marks on notice board. Test papers are shown to the students, papers are discussed in the class, and mistakes are corrected. The students are also guided and encouraged for better performance in future. The test papers are also shown to the parents.

Weightage assigned for the overall development of the student takes into consideration: regularity, punctuality and performance in the class; behavior with the fellow students and teacher; participation in co-curricular and sports activities and level of social awareness.

2.5.6 What are the graduate attributes specified by the college/ affiliating university? How does the college ensure the attainment of these by the students?

The objective behind imparting U.G. level education is to ensure that the students develop on academic level and also on personal level. The courses in UG levels, especially in life sciences, help the students in obtaining the basic knowledge essential for the higher studies and their future development. It is taken care that the students are provided with necessary education, overseeing their holistic development.

2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

Students' grievances with reference to evaluation at the college level are addressed by the subject teacher, the Head of the Department, and finally the Principal of the College along with

the examination committee, though the issues get *resolved* at the primary level in most of the cases.

With reference to the grievances redressal at the University level, the College is very supportive towards students. Presently reevaluation is not present. Student can apply for opening of answer book and / or re-totaling, that is done purely at University level. College helps students by duly forwarding applications to the University.

2.6. Student performance and Learning Outcomes

2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

Academic records are maintained regularly. The academic performance of the students is examined college.

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course? Provide an analysis of the students results/achievements and explain the differences if any and patterns of achievement across the courses offered.

Monitoring and Communication

Information regarding students progress and performance during the course is furnished by the examination committee by displaying internal marks on notice boards and informing students in the class and also informed about the performance of their wards in parents-teacher meeting. The semester results are given on the affiliated university website as well as on indiaresults.com

Analysis of the Result

The dropout percentage is less in the college. Mostly students who are selected in medical profession take dropout from the college in the 1st year. The performance of the students improves from 2nd semester onwards.

2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The institution maintains a conducive atmosphere through interactive sessions in classes and making sure that the students attend the college regularly. The students are encouraged to

consult books for their regular class assignments and daily presentations so that they can broaden their intellectual horizons.

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

The students are sent on internships in student projects specifically to inculcate knowledge in the area of their choice, for their social and economic relevance. The Employment Placement Cell, entrepreneur cell organizes Lectures and Short-term training for students. Notices related to Job vacancies and guidance for applying are provided to the students. The college wall magazine gives the opportunity to the students to develop their academic writing skills.

2.6.5 How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?

The students of the college give their feedback about the teachers and their teaching skills on the prescribed proforma provided by the IQAC. The inputs given by the students are used for quality enhancement for planning and overcoming barriers of learning.

2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?

The institution monitors and ensures the achievement of learning outcomes through students' performance in classroom; through interactive participation in curricular and co-curricular activities.

2.6.7 Does the institution and individual teachers use assessment/ evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.

The teachers use markers like- Students' performance in internals; participation in Curricular and extra-curricular activities; awards and recognitions received by students in academics and sports activities; through communicative skills, for the achievement of learning objectives and planning.

Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

Yes , recognized for Microbiology, Biochemistry from Jiwaji University. Number of students have enrolled for Ph.D in streams such as Microbiology, Biochemistry and Biotechnology.

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes, under the leadership of the director, the committee monitors the progress of research students, their problem. The difficulties and addressed and solved by the committee.

3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects?

- § autonomy to the principal investigator : Yes
- § timely availability or release of resources : Yes
- § adequate infrastructure and human resources : Yes
- § time-off, reduced teaching load, special leave etc. to teachers : Yes
- § support in terms of technology and information needs
- § facilitate timely auditing and submission of utilization certificate to the funding authorities : Yes
- § any other

3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

Students are encouraged to participate in the conferences and seminars. Encouraged to present posters and oral presentations. Analysis of clinical samples for microbiology and biochemistry and infer the results (PG students).

3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.

All the staff members are involved in the dissertation and project of PG and UG courses, come from other institutes. Senior faculty are recognized as Guides and they guide students for their Ph.D. in different streams and also different topics. Staff is encouraged to take up latest topics for research. Under research committee guidance, young staff are guided and helped in writing projects for funding. College has collaboration with Cancer Hospital & Research Institute, Gwalior and other organizations, apart from its own sister institutes for research, Gwalior unit of Association of Microbiologists of India (AMI) has been established in collaboration with MITS, Gwalior. Dr. Archana Shrivastav is nominated with consenses as President of the Society.

3.1.6 Give details of workshops/ training programs/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

To keep abreast with the research going on all over the world and the country, the institution organizes seminars and conferences to focus on capacity building and imbibing research culture among the staff and students.

- National conference on Role of Forensic in Crime Against Women (RFSCAWCON-2015) held on 25 April 2015
- National Seminar on Antioxidants in Aging, Health & Diseases oeganized on 8 April 2015.
- National Conference on HPV and control of cervical cancer – Current Scenarion held on 16 & 17 March 2013 sponsored by MPCST, Bhopal
- National Seminar on Impact of ICT in Libraries organized from 3 & 4 November 2012 sponsored by UGC, Bhopal
- Workshop organized on “Preparation of Bonsai & Landscaping” held on 19, November, 2011.
- Hands on Training on “Bonsai Cultivation and Care” on 18 September 2014.

3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

- Cancer proteomics
- Medical Microbiology
- Medical Biochemistry
- Biotechnology- Plant tissue culture,
- Enzyme purification and kinetics,
- Protein profiling
- Mushroom cultivation
- Microbial Biodiversity

3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

By organizing invited lectures, conferences and seminars the college invites experts for delivering lectures. Students are motivated to present poster and oral presentations on the topics, hence have chance to face the audiences interacting with experts during question answer session.

3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

The faculty doing Ph.D. has not paid fee and laboratory expenditure was beared by the College.

3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/ advocating/ transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)

The research work carried out at this institute is published in national international journals. Findings in microbiology has been submitted at NCBI web site. Some of the clinical findings are communicated to society. For example, use of wheat grass juice in diet of patients of cancer improves their health.

3.2 Resource Mobilization for Research

3.2.1 What percentage of the total budget is earmarked for research?

Separate head as such for research is not allocated. It is in the name of chemicals etc.

3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

Although seed money has not been allocated, but the amount needed for any laboratory items has been given to the departmental projects.

3.2.3 What are the financial provisions made available to support student research projects by students?

3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

Most of the students enrolled for Ph.D. under different supervisors of this institute, take help and suggestion from staff of different subjects. For example, a student doing Ph.D. in clinical studies, does work at biochemistry, Microbiology and Biotechnology departments and also takes help of CHRI for clinical samples and patients information.

3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

Each lab is well equipped with basic facilities for research. Students are helped by the staff in planning experiments of both PG and Ph.D students in such a way that the facilities are available to all and maximum utilized. If essential, students book the equipment so that others can plan accordingly.

3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

NO

3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

Nature of the	Duration Year	Title of the project	Name of the	Total Grant
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Project	From To		funding agency	Sanctioned Rs	Reced Rs
Major	2008-11	"In vitro manipulation of <i>Bacopa monnieri</i> for the improve- ment of bacosides production".	April, 2008 MPCST, Bhopal	7,18,000 (Proposed)	
Major	2013-15	"Invitro production of stevioside from <i>Stevia rebaudiana</i> and assessment of its pharmacological properties	MPCST, Bhopal ongoing	2,86,509	
Minor	2012-14	Immunological Studies of Breast Cancer	MPCST	200000	
Minor	2012-14	Gallbladder Carcinoma: Possible etiological factors with special references to <i>Salmonella typhi</i> Carrier State	MPCST	200000	
Minor	2012-14	Analysis of Telomerase activity in Breast cancer	UGC		
Minor	2012-14	Isolation screening and Biochemical characterization of L-asparaginase from soil bacteria	UGC	100000	
Minor	2012-14	Biotechnological exploitation & antimicrobial activity of various plant extracts against Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA)	UGC	100000	
Total grant received till date				8.86.509	

3.3 Research Facilities

3.3.1 What are the research facilities available to the students and research scholars within the campus?

Security, Cafeteria are highlights. Students can work extra hours, after college hours and also on

holidays with permission. Staff always help and guide them in experimentation and also in publications.

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

The courses run by college are emerging areas of science. Trust has generously allotted funds for the upgradation of labs to suit latest diagnosis and technology oriented.

For example- institute has proposed Animal cell culture lab with molecular diagnosis with latest equipment. This can be used for students , research as well as for consultancy services.

Biotechnology lab is under up gradation. Advanced lab is under construction

3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities?? If 'yes', what are the instruments / facilities created during the last four years.

NO

3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

MALDI-TOFF, LCMS, Proteiomics, DNA sequencing, cell line studies, bioinformatics,.

3.3.5 Provide details on the library/ information resource center or any other facilities available specifically for the researchers?

Library has collection of good books, e - journals, Journals, open access journals

3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.

New advanced lab of cell culture and Molecular lab is under construction. This lab will procure equipment for animal cell culture, Genomic and proteomic studies and Forensic diagnosis instruments such as- Real time PCR, 2D electrophoresis , inverted microscope, equipment for DNA fingerprinting

3.4 Research Publications and Awards

3.4.1 Highlight the major research achievements of the staff and students in terms of

- ★ Patents obtained and filed (process and product) : Nil
- ★ Original research contributing to product improvement : Nil
- ★ Research studies or surveys benefiting the community or improving the services

Research in medical microbiology, biochemistry and biotechnology are of basic. They give clear picture of the causes and better methods of prevention. Students take up studies on Anti cancer, anti microbial and anti oxidant properties of diet supplements. The patients coming for CHRI for therapy, are counseled for diet precautions for prolonging life and better health too. Conservation of plant biodiversity and production of bioactive molecules.

Research scholar of the college studied the effect of wheat grass juice as dietary supplement in cancer patients. This study has been successfully communicated to patients of breast cancer women. Survey has shown improvement in the health conditions and prolonged life span of women coming for chemotherapy and surgery.

- ★ Research inputs contributing to new initiatives and social development

Students and staff are in constant search for new drugs and diagnostic techniques for diagnosis, prevention and cure .

3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

Alumni in collaboration with launched a Journal "Contemporary issues in biotechnology" on Foundation Day – 2015 of the College.

3.4.3 Give details of publications by the faculty and students:

- ★ Publication per faculty

Prof. Archana Shrivastav

1. Santosh K. Yaduvanshi, Shrivastava B.R., Shrivastava A., Francesco Marotta, Shalini Jain and Hariom Yadav, (2014) Redox imbalance in different tissues of alloxan-induced diabetic rats: ameliorating effect of astaxanthin. *Diabetes & Metabolic Syndrome: Clinical Research and Reviews* (Under Reviewed) (Elsevier).

2. Rajesh Singh Tomar, Shuchi Kaushik, Neha Sharma, Neelima Shrivastava, Archana Shrivastava.(2014).Early Diagnosis of Cervical Carcinoma through Serum Biochemistry, European Academic Research Vol. II, Issue 1.
3. Faterpekar, S.K., Jain, S.K. & Shrivastav A. (2008). Degradation of Horse hair by soil inhabiting keratinophilic fungi. Journal of Cell & Tissue Research Vol. 8(2) p 1347.
4. Sudhir K Jain, Archana Shrivastav & SC Agrawal (2004). Incidence of Candidiasis Leukoplakia Cases in Cancer Suspected Patients in Microbiology & Biotechnology for Sustainable Development Edited by PC Jain CBS Publishers pp 354-357.
5. Archana Shrivastav, Neelima Singh & BR Shrivastav (2002) Humoral Immune Competence in Breast Cancer Patients. J Immunol Immunopathol (5): 57-60.
6. Pradeep Sharma, Neelima Singh, Vinod Singh, Archana Shrivastav (2002) Bio Immunology of Osteoarthritis J Immunol Immunopathol 4 (1&2): 20-28.
7. Vinod Singh, Sudhir K Jain, Archana Shrivastav (2001). Molecular Chaperons and Cancer Vaccines. J Immunol. Immunopathol. (3), 1-10.
8. Manoj Varma, Archana Shrivastav, SP Saxena (1989). The Sensitivity Pattern and High Prevalence of *Proteus sp* Isolated from Urogenital Cancerous Patients with Urinary Tract Infection. Ind. J. Med.Gaz.Vol.CXXIII No.4.
9. SP Saxena, AK Saxena, SK, Varma, S Sahai, Kekre, KK Agrawal, Archana Shrivastav (1987) Broncopulmonary Aspergillosis. Ind. J. Med. Gaz. Vol. CXXI No.4
10. Shrivastava A., Khan A.A., Shrivastav A., Jain S.K., Singhal P.K. (2012): L-asparaginase an antineoplastic enzyme, Madhyabharti journal, Dr H.S.Gaur University, sagar (Accepted).
11. Khan A.A., Shrivastava A., Khurshid M (2012) Normal to cancer microbiome transformation and its implication in cancer diagnosis. *BBA Cancer Rev* 1826(2): 331-337. (Impact factor 9.88)
12. Shrivastava A., Khan A.A., Shrivastav A., Jain S.K., Singhal P.K. (2012) Kinetic Study of L-asparaginase from *Penicillium digitatum*. *Prep Biochem Biotech*, 42(6):574-81. doi: 10.1080/10826068.2012.672943. (Impact factor 0.45).
13. Nishant Sharma, Braj Raj Shrivastav and Archana Shrivastav (2012): Qualitative Analysis of Saliva Proteins in oral cancer Separated by SDS PAGE. International Journal of Biological & Pharmaceutical Research; 3(7); 835-838.
14. Nishant Sharma, Braj Raj Shrivastav and Archana Shrivastav (2012): Exposures of Environment for Risk of Oral Cancer. Journal of Environmental Research and Development; volume 7, No-1A ; Issue July-Sep.
15. Nishant Sharma, Braj Raj Shrivastav and Archana Shrivastav (2012): Proteomics Tools for Oral Cancer Biomarker Discovery. Indo American Journal of Pharmaceutical Research; volume 2; Issue 9.
16. Nishant Sharma, Archana Shrivastav (2013): A Review on body fluids proteomics of oral cancer. International Journal of Scientific Research; volume 2; Issue 11; 70-71.

17. Shrivastav VK, Shukla D, Jana A and Shrivastav A: Comparison of efficacy of five various commercial products of Ciprofloxacin against *Staphylococcus aureus* and *Pseudomonas aeruginosa*. *International Journal of Pharmaceutical Science and Research* 2013; 4(2): 727-729.
18. Shrivastav VK, Shukla D, Parashar D, Shrivastav A: Dermatophytes and related keratinophylic fungi isolated from the Soil in Gwalior region of India and *in vitro* evaluation of antifungal activity of the selected plant extracts against these fungi. *Journal of Medicinal Plant Research*. 2013;7(28):2136-2139
19. Rajawat AS, Shrivastav VK, Shrivastav A, Singh V: *In vitro* evaluation of inhibitory activity of probiotic lactobacilli against *Candida* species isolated from vaginal flora of immunocompromised patients. *South Asian Journal of Experimental. Biology* 2013; 3(6): 325-329.
20. Sachin Sharma, Vivek Kumar Shrivastav, Archana Shrivastav, B. R. Shrivastav (2013) Therapeutic potential of wheatgrass (*Triticum aestivum*) for the treatment of chronic diseases. *South Asian Journal of Experimental Biology*, Vol 3, No 6
21. Kaushik S, Shrivastav VK, Shrivastav A and Jana AM: *In silico* vaccine design against the target L1 binding protein of Human Papillomavirus, an etiological agent of cervical cancer, using Bioinformatics tools. *International Journal of Pharmaceutical Science and Research* 2013; 4(12): 4758-62.
22. Pragati Singh, B. R. Shrivastav, Archana Shrivastav, Nishant Sharma (2014): Therapeutic Prospective Of Wheatgrass Juice (*Triticum Aestivum*) On Cervical Cancer. *World Journal of Pharmaceutical Research* Volume 3, Issue 7, 639-643.
23. Deepali Shukla, Vivek Kumar Shrivastav, A.M. Jana, Archana Shrivastav: Exploration of the potential L-asparaginase producing bacteria from soil of Gwalior (India). *International Journal of Current Microbiology Applied Science* 2014; 3(5): 665-672.

Dr. Meenu Rai

1. Vikas srivastava, gunjan srivastava, manoj pathak and **Meenu Rai** 2009. Lipid Peroxidation and antioxidant status in pre and post menopausal breast cancer. *Biomedical and pharmacology journal*; 2(2), 305 -310.
2. Neha sharma, shuchi kaushik, D. S. Rathore and **Meenu Rai** 2010. Comparative study of lipid profile in normal and different stages of breast cancer. 2(1& 2); 362-368
3. M. Suhail, **M. Sharma** and F. Ahmad 1987. Study on the protein constitution of goat red cell membrane. *Pro c. nat. Acad. Sci. India*; 57 (B) IV; 387-392
4. M. Suhail, **M. Sharma** and F. Ahmad 1988A comparative analysis of glycopeptides of human and goat erythrocyte membrane. *Nat. acad. Sci. letters*; 11(7), 224-227.

Dr. Tejovathi Gudipati

1. Shivaji Mahur, Amarendra Pratap Singh, Dr.CK Shrotriya & Dr. G.Tejavathi. "Role of Biotechnology and Secondary metabolites from medicinal plants in medicine. International Conference on Climate Change & Sustainable Management of Natural Resources organized by IASCA, ITM Universe, Gwalior. (M.P) 10-12 Nov 2009.
2. Tejavathi Gudipati, Harisharan Goswami, and Rekha Bhadouria. 2011. *In Vitro* flowering in *Bacopa monnieri* (L.) Pennel and the influence of growth regulator, genotype, explants and its physiological age. J. of Medicinal Plant ;3(2); 1-4.
3. Tejavathi Gudipati, Harisharan Goswami and Rekha Bhadouria. 2011. *In vitro* propagation of endangered medicinal plant- *Commiphora wightii*. Ind. J. Sci. and Tech. vol. 4; 11; 1537-1541.
4. Tejavathi Gudipati, Pratima Srivastava, Rekha Bhadouria and GBKS Prasad. 2012 Hepatoprotective potential of *Bacopa monnieri* against carbon tetrachloride – Induced hepatotoxicity in albino mice. [Inter. J. of Pharma and Bio Sci.](#)
5. Shalini Khole, Shwetha Kulshreshtha and G.Tejavathi. 2011. Safety aspects of Educational Institute's Drainage water Int. J. Life Sci. and Phar. Res.
6. Tejavathi Gudipati 2009. Two decades of *in vitro* studies in safflower. In national Symposium on Perspectives of genomics and Proteomics. Held at Osmania University, Hyderabad.
7. Santosh Kumar Jatav, Archana Kulshreshtha, Anish Zacharia, Nita Singh, G. Tejavathi, P. S. Bisen and G. B. K. S. Prasad 2014. *Spirulina maxima* Protects Liver From Isoniazid and Rifampicin Drug Toxicity. *Journal of Evidence-Based Complementary & Alternative Medicine* accepted.
8. Amit Sen, Poonam Dhavan, Kshitiz Kumar Shukla, Sanjay Singh, G. Tejavathi (2012) Analysis of IR, NMR and Antimicrobial activity of β -Sitosterol from *Momordica charantia*. *Sci Secure J Biotech*, 1(1):9-13.
9. Amit Sen, Sumit Singh, G. Tejavathi (2012) Isolation and Enrichment of Hydrolytic Microorganisms for Sewage Waste Management: A Pilot Study. *Asian Journal of Biotechnology Microbiology and Environmental Science*, 14(3): 445-450.
10. Amit Sen, Kshitiz Kumar Shukla, Sanjay Singh, G. Tejavathi (2013) Impact of heavy metals on root and shoot length of Indian mustard: An initial approach for phytoremediation. *Science Sci Secure J Biotech*, 2(2):48-55

Dr. Abhinav Shrivastava

1. A Khan A.A., Khan Z., Malik A., Shrivastava A., Jain S.K. and Alshamsan A.,(2015) Computational prediction of E.coli protein host subcellular targeting and their implications in colorectal cancer etiology, *Cancer letters* (Accepted). (Impact factor 5.0)
2. Shrivastava A., Khan A.A., Khurshid M., Kalam M.A., Jain S.K., Singhal P.K. (2015) Recent developments in the field of L-asparaginase discovery and its potential as anticancer agent, *Critical reviews in oncology and hematology* (Accepted). (Impact factor 4.04)

- 3.** Khan A.A., Shrivastava A., Khurshid M (2012) Normal to cancer microbiome transformation and its implication in cancer diagnosis. *BBA Cancer Rev* 1826(2): 331-337. (Impact factor 9.88)
- 4.** Shrivastava A., Khan A.A., Shrivastav A., Jain S.K., Singhal P.K. (2012) Kinetic Study of L-asparaginase from *Penicillium digitatum*. *Prep Biochem Biotech*, 42(6):574-81. doi: 10.1080/10826068.2012.672943. (Impact factor 0.45)
- 5.** Khan A.A., Shrivastava A. (2010) Bacterial infections associated with cancer: possible implication in etiology with special reference to lateral gene transfer. *Cancer Metastasis Rev* 29 (2): 331-337 (Impact factor 9.3).
- 6.** Shrivastava A, Khan A.A., Jain S.K., Singhal P.K., Jain S, Marotta F., Yadav H. (2010) Biotechnological advancement in isolation of anti-neoplastic compounds from natural origin, a novel source of L-asparaginase. *Acta Biomed* 81(2): 104-108.
- 7.** Khan A.A., Shrivastava A., Jain S.K. (2010) In vitro susceptibility of antibiotics against pathogenic bacteria. *Biozone Int J Life Sci.* 1(1): 24-27.
- 8.** Shrivastava A., Khan A.A., Shrivastav A., Jain S.K., Singhal P.K. (2012) Kinetic study of immobilized L-asparaginase from *Aspergillus flavus* (Communicated).
- 9.** Shrivastava A., Khan A.A., Shrivastav A., Jain S.K., Singhal P.K., Suri N., Saxena A.K. (2011) "Purification, kinetic study and Invitro cytotoxicity evaluation of L-asparaginase from *Fusarium solani*" (Communicated)
- 10.** Shrivastava A., Khan A.A., Jain S.K., Singhal P.K. (2012) Bacterial asparaginase: A potential antineoplastic agent for treatment of acute lymphoblastic leukemia. *Bacteria and Cancer* (Ed.) Abdul Arif Khan, Springer Science Publisher, Netherlands, p. 225-244.

Dr. Santosh Kumar Yaduvanshi

- 1.** Santosh K. Yaduvanshi, Shrivastava B.R., Shrivastava A., Francesco Marotta, Shalini Jain and Hariom Yadav, (2015) Redox imbalance in different tissues of alloxaninduced diabetic rats: ameliorating effect of astaxanthin. *Diabetes & Metabolic Syndrome: Clinical Research and Reviews* (Under Reviewed) (Elsevier).
- 2.** Catanzaro R, Celep G, Illuzzi N, Milazzo M, Rastmanesh R, Yaduvanshi SK, He F, Trushin M, Sapienza C, Srivastava N, Marotta F. (2014). Anti-inflammatory and antimutagenic effect of the YHK phytocompound in hepatocytes: in view of an agemanagementliver-protecting approach. *Rejuvenation Res.* 17(2):168-71.
- 3.** Marotta F, Lorenzetti A, Catanzaro R, Zerbini N, Jain S, Solimene U, Yaduvanshi SK, Yadav H, Sapienza C, Srivastava N, Milazzo M, Italia A. (2013). A sturgeonderived bioactive compound beneficially modulates nuclear receptors controlling metabolic functions in patients with metabolic syndrome. *Acta Biomed.* 84(1):53-60.
- 4.** Yaduvanshi SK, Srivastava N, Prasad GB, Yadav M, Jain S, Yadav H (2014). Genotoxic Potential of Reactive Oxygen Species (Ros), Lipid Peroxidation and DNA Repair Enzymes

- (Fpg and Endo III) in Alloxan Injected Diabetic Rats. *Endocr Metab Immune Disord Drug Targets*. [Epub ahead of print] (Bentham Science)
5. Yaduvanshi SK, Srivastava N, Marotta F, Jain S, Yadav H (2012). Evaluation of micronuclei induction capacity and mutagenicity of organochlorine and organophosphate pesticides. *Drug Metab Lett*.6(3);187-97 (Bentham Science)
 6. Anupama Ojha, Santosh K. Yaduvanshi and Nalini Srivastava (2011). Effect of combined exposure of commonly used organophosphate pesticides on lipid peroxidation and antioxidant enzymes in rat tissues. *Pesticide Biochemistry and Physiology*. 99; 148-156. (Elsevier)
 7. Santosh K. Yaduvanshi, Anupama Ojha, Satish C. Pant, Vinay Lomash and Nalini Srivastava (2010). Monocrotophos induced lipid peroxidation and oxidative DNA damage in rat tissues. *Pesticide Biochemistry and Physiology*. 97; 214-222. (Elsevier)
 8. Anupama Ojha, Santosh K. Yaduvanshi, Satish C. Pant, Vinay Lomash and Nalini Srivastava (2011). Evaluation of DNA damage and cytotoxicity induced by three commonly used organophosphate pesticides individually and in mixture, in rat tissues. *Environmental Toxicology*. 28 (10);543-52. (Willey Inter Science)
 9. Santosh K. Yaduvanshi, Anupama Ojha and Nalini Srivastava (2014). Studies on genotoxicity of organochlorine and organophosphate pesticides (endosulfan, lindane, monocrotophos and chlorpyrifos) on different tissues of rats. *Environmental and Molecular Mutagenesis*. (Under Reviewed) .(Willey Inter Science)
 10. Santosh K.Yaduvanshi and Nalini Srivastava (2014). Studies on oxidative Stress and oxidative damage to DNA in patient with type 2 Diabetes mellitus (T2DM): Evaluation of therapeutic/ prophylactic potential of polyherbal Drugs, Diabegone. *Diabetes & Metabolic Syndrome: Clinical Research and Reviews* (Under Reviewed) (Elsevier).

Dr. Madhu Gupta

1. K. Jain and Madhu Gupta. Impact of Environmental Factors on Pollen Dispersal in Air at Different Sites in Gwalior (M. P.). *Bionature*. 19 (2): 75-82, (1998). ISSN: 0970-9835
2. Madhu Gupta and A.K. Jain "Seasonal airborne pollen scenario at extramural site (Kampoo) at Gwalior (M.P.), published in *Bionature*, 30 (2): 131-138 (2010). ISSN: 0970-9835
3. Madhu Gupta and A.K. Jain "Atmospheric pollen spectra of University campus, Gwalior during 2006-2008 published in *Indian Journal Of Aerobiology* 24 (1):19-27 (2011) ISSN: 0971-1546.
4. Madhu Gupta and A.K. Jain "Incidence of Pollen grains in the atmosphere of Gwalior District- A one year study", published in *Journal of Environmental Research And Development*, 6 (3A) : 631-637 (Jan.- March 2012) ISSN: 0973-6921.

5. Sharma A.K., Gupta M., Shrivastav A. and Jana A.M., Antioxidant and anticancer therapeutic potentiality of Mushroom: A Review. *Int. J. Pharm Sci Res* 2013; 4 (10): 3795-02. ISSN: 2320-514.
6. Madhu Gupta, Archana Shrivastav and A.M. Jana; "pilot scale production and biological efficiency of oyster mushroom by using different agro wastes, published in *Biosci. Biotech. Res. comm.* 6 (2; 182 – 185 (2013) Print ISSN: 0974-6455, online ISSN: 2321-4007.
7. Arvind K. Sharma, A.M. Jana, Archana Shrivastav, Madhu Gupta, Sachin Sharma, Sher Singh "Antimicrobial properties of some edible mushrooms- A Review" published in *world journal of pharmacy and pharmaceutical sciences*, 3 (5):1009-1023 (2014) ISSN:2278-4357,
8. Madhu gupta and A.K. Jain "Aerophycological survey with special reference to their allergenic significance "A review" published in *Biozone, An- International journal of life sciences*, *Biozone*, Vol. 2 (1&2): 294-297 (2010). ISSN: 0974-8873
9. Madhu Gupta and A.K. Jain "Incidence of Pollen grains at an Urban site at Gwalior" published in *Biological Forum – An International Journal*, 2 (2) : 11-14 (2010). ISSN: 0975-1130
10. Madhu Gupta "Aero algae and Allergy- A- Review, published in *Biozone- An International journal of life science*, 3 (1 \$ 2) : 504-507 (2010). ISSN: 0974-8873
11. Madhu Gupta "Atmospheric pollen at an extramural site (Kampoo) at Gwalior (M.P.)"Published in *Adhikar – An International Research Refereed Journal*, Y-2 (8); 50-57(August 2012). ISSN: 2231-2552

Dr. Sunita Bhargava

1. Sunita Bhargava,D.D Agrawal and O.P. Agrawal . Repellency Chacteristics Of Plants Extracts In Laboratory Condition. *Journal of Environmental and Social Research* vol (2) 2013 PP 56-65, ISSN 2277-5226.
2. Sunita Bhargava. Impact Of Green Chemistry In Present Scenario. *Ultra chemistry* vol 9. (1), 2013 PP 121-120.ISSN 2319-8036(online)
3. Sunita Bhargava,D.D Agrawal and O.P. Agrawal Phytochemical Screening And Evaluation Of Its Repellent Activity Of *Melia Azedarach* L. *Indo American Journal of Pharmaceutical Research* 2013 PP 4310-4318.ISSN 2231-6876.
4. Sunita Bhargava,D.D Agrawal and O.P. Agrawal Repellent Activity Of Essential Oil And Leaf Extract Of *Lantana Camara* L. In Laboratory Conditions. *International Journal of Theoretical & Applied Sciences* 5(1): 170-174(2013). ISSN. (Online): 2249-3247 ISSN. (Print): 0975-1718
5. Sunita Bhargava, and Sharad Bhargava. Ecological Consequences Of The Acid Rain. *IOSR Journal of Applied Chemistry* vol 5(4) PP19-24, ISSN.2278-5736 (2013)
6. Sunita Bhargava,D.D Agrawal and O.P. Agrawal The Role Of Calcium In Cancer Prvention. *Indo American Journal of Pharmaceutical Research* 2013 PP 1249-1255 . ISSN .2231-6876.

7. Sunita Bhargava. The Role Of Diindolylmethane In The Prevention And Treatment Of Cancer *World Journal of Pharmacy and Pharmaceutical Sciences* 2014, VOL.3ISSU 7,359-369 ISSN 2278-4357
8. Sunita Bhargava, and D.D Agrawal . Drinking Water Quality From Selected Different Location Of Kampoo Areas, Gwalior . *Asian Journal Chemical and Environmental Research* Vol 7, (1-4) 73-77 ,2014
9. Sunita Bhargava,D.D Agrawal and O.P. Agrawal "Mosquito Repellent Action Of Some Plant Oils" *Frontiers in Environmental research*,2012,PP 154-161, ISBN.978-93-80525-71-6

Mrs Neelima Shrivastava

1. Rajesh Singh Tomar, Shuchi Kaushik, Neha Sharma, Neelima Shrivastava, Archana Srivastava.(2014).Early Diagnosis of Cervical Carcinoma through Serum Biochemistry, EUROPEAN ACADEMIC RESEARCH Vol. II, Issue 1.

Mr. Nishant Sharma

1. Nishant Sharma and Archana Srivastava (2013). A review on body fluids proteomics of oral cancer. *International Journal Of Scientific Research*; 2(11),70-71.
2. Pragati Singh, B.R. Srivastava, Archana Srivastava, Nishant Sharma (2014). Therapeutic prospective of wheat grass juice on cervical cancer. *World Journal of Pharmaceutical Research*, 3(7), 639-643.

Mrs. Usha Duseja

1. Usha Duseja and Archana Srivastava (2014). Isolation, biochemical characterization and preparation of biofertilizers using *Rhizobium* strains for commercial use.AIMLTA MEDILAB CON-2014(40th annual conference),New Delhi (ISSN) 2349-1302.
2. Usha Duseja, Archana Shrivastava , Isolation, biochemical Characterization and preparation of biofertilizers using *Rhizobium* strains for commercial use : AIMLTA MEDILAB CON-2014 (40th Annual Conference) held on 29th -30th Dec.2014 at New Delhi. (ISSN 2349-1302) Volume: xxxv Special issue.
3. Usha Duseja, Archana Shrivastava 'Isolation and Physico-Chemical Characterization of the *Rhizobium* Strains Isolated from the *Vigna* Fields of Gird Region of Madhya Bharat' is accepted for publication in JAIR.

- ★ 6Number of papers published by faculty and students in peer reviewed journals : Nil (national / international)

3.4.4 Provide details (if any) of

- ★ research awards received by the faculty : None
- ★ recognition received by the faculty from : None

reputed professional bodies and agencies

- ★ Staff are recognized as referees in various journals
 - Dr. Archana Shrivastav :
 - Dr. Tejovathi : Indian National Academy of Science
 - Dr. Madhu Gupta : Bionature

3.5 Consultancy

3.5.1 Give details of the systems and strategies for establishing institute - industry interface?

College is trying to develop strategies for the same.

3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

Staff give consultancy to persons in research in the field of life sciences free of cost.

3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

Institute has given freedom to the staff in utilizing expertise and available facilities for consultancy service.

3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

College has provided services in past and generated revenue of very small amount by investigating potability of water and quality of milk from milk dairies.

3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

Staff is involved in the guiding of students for their dissertation and project work. The college gives financial incentives to the staff on the per dissertation basis.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 How does the institution promote institution-neighbourhood- community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

The college organizes extension and outreach programs through NSS unit, Eco-club and by organizing various programs of society services. The college organizes awareness camps like Blood Donation, Tree Plantation, Water Conservation, AIDS and health awareness. The students carry out Anti-Drug Campaigns through Anti-Drug rallies. The students spread awareness of the adverse effects of polythene and plastic on environment.

The students participated in programs related to work for better awareness about female foeticide 'beti bachao', gender discrimination and safety for women. All of these activities are aimed at programs and activities included the holistic development of the students and for community benefit.

3.6.2 What is the Institutional mechanism to track students' involvement in various social movements / activities which promote citizenship roles?

NSS wing coordinator Mr. Nishant Sharma and two staff, Dr. Sunita Bhargava and Mr. Umesh Kushwah monitor the involvement of students in various NSS involved events. Similarly Eco-club, NSS wing of the college monitor participation of students in environment and community related activities held at the level of college, city, national level.

3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

The views of students, faculty, parents and alumni are solicited through direct interaction and formal feedback received from them. The Grievances and complaints from the students and parents are taken by respective college committees and provide prompt redressal. The Staff meetings held periodically help in provide platform for the staff to express their views on quality enhancement.

3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

College also receives funds for NSS from Jiwaji university and wherever needed college also contribute for these purposes.

3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/

International agencies?

The students participate in the NSS unit and other activities organized under college of Life Sciences and Jan Vikas Nyas. Keeping in with the holistic philosophy of the college, the students are constantly encouraged to take part in social activities and society relevant issues which develop and expand their intellectual horizons and make them more responsible individuals.

In 2014-15

- Swach Bharat Abhiyan
- Run for Unity
- Environment awareness Programme
- “No tobacco ” program
- AIDS awareness program
- Blood donation
- Cancer awareness camp

Apart from these students participated in programs organized under Eco club and CHRI, Jan vikas nyas.

In 2013-14

- Environment awareness Program on “World Environment Day”
- No tobacco day
- Aids Day
- World Cancer Day
- NSS week
- Cultural Activities
- Republic day march past in the college grounds
- Sports weeks
- Science Day
- Plantation for environment protection

In 2012-13

- AIDs Day,
- NSS Day
- Poster Presentation on Unity
- Shram Dan for environment awareness
- NSS week camp
- Rally for creating awareness on Alcohol drinking

- Blood donation camp
- Plantation
- Campaigning for cancer awareness and prevention of tobacco consumption

In 2011-12

- Environment awareness & Plantation Program
- “No tobacco ” program
- AIDS awareness rally
- NSS Annual camp
- World literacy day
- World population day
- Blood donation
- Teachers day
- Science Day

In 2010-11

- Environment awareness Program
- “No tobacco ” program
- AIDS awareness program
- Blood donation
- Plantation & shramdan
- Wall magazine competition
- Teachers Day
- International literacy day
- Gandhi jayanti
- Science Day

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

Mr. Nishant Sharma, Coordinator, NSS and Dr. Sunita Bhargav, Mr. Umesh Kushwah, members of faculty, NSS unit organize various awareness programs in the near by under developed colonies on hygiene, cancer, irradiation of tobacco use, AIDs awareness programs. They also visit Madhav Ashram for Orphanage children and organized various games and distributed food and motivated them. Under Dr. Archana Srivastav, students organized programs on Beti bachao. Dr. Archana Srivastava co-ordinator and Dr. Madhu Gupta, convener of Eco-club organized

awareness on Water conservation, plant protection, self employment by cultivation of mushrooms using agro waste, environment protection and improvement.

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

The participation in extension activities helps students' holistic development, leadership qualities. They learn the organizational skills that help them in future life.

3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

College reaches up to the community. However, involvement of community in these activities is less encouraging. Practically it is a slow process. Programs such as singing, dance photographs, communicating in their local language helps us in reaching to them.

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

A cordial relationship is maintained with all the other institutions present in the locality.

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

Dr. Archana Srivastav, Head, Department of Microbiology and coordinator of Eco club has received award from Divya Jyoti jagriti sansthan organization for working for **Women santulan** in the society.

3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

College is making efforts in this direction.

3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

College has signed MOU with Shambhavi Solar Power Supply Private Limited company for research project submitted to BIRAC. Somehow, the MoU could not be successful. Dr.Tejevathi is working on a project in collaboration of BARC, Mumbai.

3.7.3 Give details (if any) on the industry - institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc.

No

3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

Names of eminent scientists contributed to events in the last four years.

1. Dr. Jana, Retd. HOD & Scientist, Virology Department, DRDE, Gwalior.2015
2. C.P. Kulshreshtha, Retd, Judge, Gwalior role of judiciary in Forensic science, 2015
3. Honbl'e Justice Shri A.K. Shrivastava, ' Role of judiciary in broad spectrum in crime against women', 2015
4. Shri C.P. Kulshreshtha, Retd. ADJ, Gwalior 2015
5. Shri Rajendra Shrivastava, Sr. Advocate, Gwalior, 2015
6. Dr. Kaushal Luthera, Ideas Dental College, Delhi, ' Teeth: as an offensive or as a defensive weapon during an attack', 2015
7. Dr. Yogendra Paharia, Dentist, GRMC, Gwalior, 2015
8. Dr. Bhanu Dubey,Dean, GM Medical college Bhopal, ' Role of forensic medicine in female protection' 2015
9. Dr. Dingra, Director , Forensic science Department, GWALIOR, 2015
10. Dr. G.S. Patel, Dean, GRMC, Gwalior, 2015
11. Dr. G.B.K.S. "Has forensic science any key role in prevention of crime against women", 2015
12. Dr.Geeta Narhari, HOD, Management Department, ITM University, 2015.

13. Dr. Jyoti Bindal, HOD, Gynec, GRMC, 2015
14. Shri Deepak Bhargava, CSP, Gwalior, 2015
15. Shri Bhupendra Jain, secretary, rotary club, Gwalior, 2015
16. Mr. Harsh Sharma, Bhopal Topic : "Crime scene management" Chairpersons : Dr. Nikhil Agrawal, Gwalior, 2015
17. Shri Rajiv Sahai Oration Topic : Silent witnesses speak out at crime scene Speaker : Mr. Harsh Sharma, Regional Forensic Laboratory, Bhopal, 2015
18. Dr. Shailja Jain, Department of Food and Nutrition, KRG College, Gwalior, 2015
19. Dr. Vivek Gupta, JALMA, Agara, "Antioxidants in Aging, Health and Diseases" on 2015
20. Prof. I.K. Patro, Department of Neuroscience, Jiwaji University, Gwalior, 2015
21. Prof. A.K. Jain, Professor in Botany, School of Studies in Botany, Jiwaji University, 2011 & 2014, 15.
22. Prof. Rekha Bhadauria, Professor in Botany, School of Studies in Botany, Jiwaji University, 2014, 2015
23. Mr. Arun Raut, Chairman, Bonsai & landline escaping, Gwalior 2014 & 2011
24. Dr. B.C. Das, Ambedkar Centre of Biomedical Research Delhi Human papillomavirus infection and its clinical relevance and control March, 2013
25. Dr. Suresh Bhambhani, ICPO Noida HPV infection –changes in cervical epithelium and pathogenesis, 2013
26. Dr. Mausami Bhardwaj, ICPO Noida, Human papillomavirus (HPV), cervical cancer and HPV vaccine, 2013
27. Dr. M.M. Parida, DRDE Gwalior Various methods of molecular diagnosis of HPV, 2013
28. Dr. Rahul Shrivastava, MANIT Bhopal Computational strategies for cervical cancer treatment, 2013
29. Dr. Shashi Alok, BU Jhansi Natural and Synthetic compounds for cervical cancer treatment in India
30. Dr. Nalini Shrivastava, School of Studies in Biochemistry, Jiwaji University, Gwalior
31. Dr. Suman Jain, School of Studies in Pharmaceutical Sciences, Jiwaji University, Gwalior
32. Dr. Pawan Das, Department of Virology, DRDE Gwalior
33. Dr. P. K. Tiwari, School of Studies in Human Molecular Genetics, Jiwaji University, Gwalior
34. Dr. Y.K. Jaiswal, School of Studies in Biochemistry, Jiwaji University, Gwalior
35. Dr. Jot Sharma, Birla Institute Gwalior
36. Dr. Sameer Bhagyawant, School of Studies in Biotechnology, Jiwaji University, Gwalior
37. Dr. OP Agarwal, Director, School of Studies in Environment Sciences, Jiwaji University
38. Dr. R.J. Rao, Rector, Jiwaji University

39. Dr. R.G. Garg, Jiwaji University, Gwalior Digital Information storage & Retrieval in Hindi Problems and prospects, 2012
40. Dr. Shivpal Singh, National Law University, Bhopal on 'Library Automation with Web 2.0 Integration for the Library users'.2012
41. Dr. Pawan Sharma, ITM University, Gwalior on 'Application of ICTs in Academics Libraries', in 2012.
42. Prof. Rochna Shrivastava, Bundelkhand University, Jhansi on 'Strategic Issues In Digitizing Collection' in 2012
43. Dr. Satyaprakash Singh, Asia Pacific Institute of Management, Delhi. ' Role of ICT for Library and Information services in Academic Libraries' 2012
44. Prof. R.K. Saxena, Department of Microbiology, Delhi University, 2011
45. R.K. Dhakad, Scientist, Department of Biotechnology, DRDE, Gwalior, 2015
46. Dr. Rakesh Bhargava, DRDE, Gwalior, 2015
47. Dr. Shan Khan, Director, Helix Biomolecules, Chennai, 2011
48. Dr. Neeta Mishra, Biochemistry Department, AIIMS, Delhi.

3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated -

Nil

3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations.

Nil

Any other relevant information regarding Research, Consultancy and Extension which the college would like to include : No

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

College is expanding its building by constructing another floor, renovation of the biotechnology lab. Cell culture lab has already been sanctioned in the earlier budget. Seminar hall with audio visual facilities has been developed for the weekly presentations of the students.

4.1.2 Detail the facilities available for

a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

All department have good laboratories. Time to time, facilities are made according to requirements. College propose a herbal garden which is although slowly in guidance of Dr. A.K.Jain, Jiwaji University. Other information is mentioned elsewhere.

b) Extra – curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

Sports activities (indoor and outdoor games for students and staff) were done on National Sport's Day and Annual Sport Meet. Various competitions and Annual Cultural Program were organized in every year.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).

College has all basic facilities such as class rooms, Labs, Library, sports ground, etc. Master Plan of the college campus is enclosed as **Annexure IV**. College of Life Sciences, fortunate to have complete co-operation and support from all its sister institutes.

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

So far no physically disabled person has taken admission in the college.

4.1.5 Give details on the residential facility and various provisions available within them:

- | | |
|--|---------------------------|
| ★ Hostel Facility | : available |
| ★ Recreational facilities, gymnasium, yoga center, etc. | : No |
| ★ Computer facility including access to internet in hostel | : in the process |
| ★ Facilities for medical emergencies | : Available |
| ★ Visitors Room | : No |
| ★ Library facility in the hostels | : No |
| ★ Internet and Wi-Fi facility | : In process |
| ★ Recreational facility | : Sports ground available |
| ★ Available residential facility for the staff and occupancy | : Yes |
| Constant supply of safe drinking water | |
| ★ Security | : Yes |

4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

The medical & health services are provided to students and staff at CHRI and SSIMS.

4.1.7 Give details of the Common Facilities available on the campus

Health Centre, Canteen, auditorium in CHRI, etc.

4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes. The composition is as follows-

Dr. Meenu Rai, Principal	: Chairperson
Mr. Umesh Kushwah	: Convener
Dr. Abhinav Shrivastava	: Member
Dr. Sunita Bhargava	: Member
Mrs. Neelima Shrivastava	: Member
Mrs. Jyoti Jain	: Member
Mr. Ram prajapati	: Student
Mr. Abhishekh Singh Tomar	: Student

The committee plans development activities of the library including maintenance, expansion, purchase and library reforms. Mr. Umesh Kushwah, Librarian & convenor, plays major role in the implementation and in helping the students.

4.2.2 Provide details of the following:

- ★ Total area of the library : approx. 38 X 61 sq. ft
- ★ Total seating capacity : 53 students
- ★ Working hours : Library working hours are 9.30 AM to 3:30 PM (1.00 pm to 1.30 pm is lunch) on working days only
- ★ Layout of the library : Since library is inside the college, so separate lay-out is not available

4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

Books purchase procedure begins when-

- When new course or revision in the syllabus is done : Yes
- When specific book title/ author is in demand : Yes

College also organizes book exhibition by publishers or book sellers. Staff gets opportunity to go

through the new publications and any book is of curriculum related or carrier oriented, will be recommended by the staff. The demand for the book(s) is send to library committee. On approval, as per the college purchase procedure books are acquired.

Library holdings	Year 2011-12		Year 2012-13		Year 2013-14		Year 2014-15	
	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost
Text books	75	99696	10	-	-	-	13	23325
Reference Books	12		-	-	-	-	-	-
Journals/ Periodicals	10	14620	10	16750	-	-	-	-
e-resources	31	-	-	-	-	-	-	-
Any other (specify)								

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- ★ OPAC Available
- ★ Electronic Resource Management package for e-journals : Nil
- ★ Federated searching tools to search articles in multiple databases : Nil
- ★ Library Website - : Available
- ★ In-house/remote access to e-publications- : Nil
- ★ Library automation- : Available
- ★ Total number of computers for public access- : two
- ★ Total numbers of printers for public access- : Nil
- ★ Internet band width/ sp : 2mbps 10 mbps 1 gb
- ★ Institutional Repository(storage area , store- house) ☐ : Available
- ★ Content management system for e-learning- : Nil
- ★ Participation in Resource sharing networks/consortia (like Inflibnet) : Nil

4.2.5 Provide details on the following items:

- ★ Average number of walk-ins- : 50
- ★ Average number of books issued/returned :80 (card system for students)
- ★ Ratio of library books to students enrolled :1 : 8.26
- ★ Average number of books added during last three years :36 books + dissertations
- ★ Average number of login to opac (OPAC) : 25

- ★ Average number of login to e-resources : 31
- ★ Average number of e-resources downloaded : 15
- ★ Number of information literacy trainings organized : one
- ★ Details of “weeding out” of books and other materials : 25 books + desertation reports before year 2011

4.2.6 Give details of the specialized services provided by the library

- ★ Manuscripts : No
- ★ Reference : Available
- ★ Reprography : Available
- ★ ILL (Inter Library Loan Service) : No
- ★ Information deployment and notification : Available
(Information Deployment and Notification)
- ★ Download : Available
- ★ Printing : No
- ★ Reading list/ Bibliography compilation- : Available
- ★ In-house/remote access to e-resources- : No
- ★ User Orientation and awareness

Orientation programme is organized at the beginning of the session for new students, during the session students are acquainted with rules, facilities available and also the mechanism of book issuing.

- ★ Assistance in searching Databases : No
- ★ INFLIBNET/IUC facilities : No

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

- Clear mentioning of library period in the time table of each course/ semester is available.
- Students are encouraged to access library for reading, and temporary book issuing.
- Open access facility for teaching staff
- News paper display at office for the staff
- Updating of new arrivals to staff

4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

So far college has not faced enrollment of students with visually/ Physically challenged. So, no special facility is developed in the library.

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

A suggestion Box is displayed out side the Library. Any student wants to give suggestion in writing can drop the same in the box. Box is opened frequently. The suggestions, if any, are discussed in library committee meeting and necessary action is taken. Suggestions from the student members in the library committee are also considered for further improvement.

4.3 IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the institution.

- ★ Number of computers with Configuration (provide actual number with exact configuration of each available system) : PH-10
- ★ Computer-student ratio : 1:18
- ★ Stand alone facility : -
- ★ LAN facility : Yes
- ★ Wifi facility : No
- ★ Licensed software : No
- ★ Number of nodes/ computers with Internet facility : 10

4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

Computer and internet facility is available in Biotechnology, Microbiology laboratories. A common facility is also available in staff room in UG section and in office. Computer lab with internet facility is also available for faculty and students. Mr. Munesh and other computer technicians help them as when necessary No off campus facility is available

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

In the next 3 years upgradation of computers, wifi facilities in lab, computer facilities in girls

hostel are planned.

4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

	Head of Account	Expenditure			
		2011-12	2012-13	2013-14	2014-15
a.	Building	6350.00	-	-	-
b.	Furniture		1,99,890		
c.	Equipment	26491	134929	15100	137206
d.	Any other (Books)	72780			17119

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?

As the courses run in the institute are basically related to modern technology, for effective teaching and learning process, staff use PPT presentations, Down loaded 3D presentations of structures like of DNA , chemical molecules, even animated film available on the web sites.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/ learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

Students are given assignment/ project work/ models and charts preparation and they all present their project by OHP or LCD projector. Thus, students learn computer usage, application of various soft wares and also some effect such as slide effect background change and sound.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

No

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

	Head of Account	Expenditure			
		2011-12	2012-13	2013-14	2014-15
a.	Building	6350			
b.	Furniture		199890		
c.	Equipment	26491.00	134929.00	15100.00	137206.00
d.	Any other (Books)	72780.00			17119.00

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

Maintenance department consists of security, electricity, water, telephone, building and instrastuctural facility maintenance staff. This is under Jan Vikas Nyas trust. On telephonic or on return complaint (on demand / complain book), the department staff attend the complaint and the problem is addressed at the earliest. buggetary allocations are done for these work every year.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/ instruments

As and when required, college hire these facilities.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

The college has installed stabilizers for sensitive equipment. Water coolers are constantly used and boring is available in campus premises.

Any other relevant information regarding Infrastructure and Learning resources which the college would like to include : No

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes. College publishes prospectors/ brochure/ information bulletin. It contains -**Annexure- 6**

- Vision, Mission and objectives of the college
- College profile
- General rules for admission and mode of admission
- Courses offered in UG, PG courses

- Subjects offered at UG, combinations of subjects and their codes
- Seats available and eligibility for admission
- Fee structure
- Faculty information
- Application form and additional information

5.1.2 Specify the type, number and amount of institutional scholarships / freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?

About 60% of the students enrolled in the college, belong to SC/ST and OBC categories. These students receive scholarships either from state and central governments under various schemes. The institution provides easy payment of fee like in installments for needy students and for SC/ST/OBC students admission is done on scholarship bases.

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

About 60% of the students enrolled in the college, belong to SC/ST and OBC categories. These students receive scholarships either from state and central governments under various schemes

5.1.4 What are the specific support services/ facilities available for

- **Students from SC/ST, OBC and economically weaker sections**

Students enrolled in the college, belong to SC/ST and OBC categories. These students receive scholarships either from state and central governments under various schemes. Book bank facility is available for students for each semester. Special care is taken for students weak in learning.

- **Students with physical disabilities**

So far no student with disability has enrolled in the college. However, special care/ help is provided to visitors, if any, comes. Their needs are address on priority basis.

- **Overseas students**

No students from overseas has enrolled in the college

- **Students to participate in various competitions/ National and International**

Students participate in various seminars/ conferences/ workshops. According to the need, help is provided.

- **Medical assistance to students: health centre, health insurance etc.**

Free Medical assistance for all students and staff is available at CHRI. General check, First aids are available freely. Sister institutes- CHRI, PGCN and SSIMS, running under Jan vikas Nyas trust provide medical assistance, health care for the students free or on nominal payment basis.

- **Organizing coaching classes for competitive exams**

Special guidance is given to students, who want to appear in the competitive examinations like NET, GATE. Library provides Study material for these examinations. It also has CDs of MCQs for life sciences to help students in the practicing the same.

- **Skill development (spoken English, computer literacy, etc.,)**

Facility are given to learn computer and Net facilities. Instructors are available who give support in learning computer applications for needed students.

- **Support for “slow learners”**

Special care is taken for the students of slow learners. Extra class are being taken for them. Open book class tests, reading the book in the class, black board explanation and discussion by students, distribution of study material, assignment are some of the supports provided for them.

- **Exposures of students to other institution of higher learning/ corporate/ business house etc.**

Students of Life Sciences final semester, undergo internship/ training in educational institutes. Paramedical students go for training in hospitals.

- **Publication of student magazines**

Research scholars and students present their work in the conferences. College also encourages students to present latest developments in science on wall magazine of the college. These are displayed for all on special notice board.

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

College has started Entrepreneur development cell. Dr. Madhu Gupta, convener, organizes short term training to students, of UG & PG both from college and outside students on Mushroom cultivation. The cell also organized bonsai plants growth & landscaping and mushroom

cultivation workshops in the college to entrepreneurial skills in students.

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co - curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.

Flexibility in appearing in the internal examination is given, special examinations are conducted.

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.

PG students of life Sciences are encouraged to appear in NET, GATE state and central services. About 5 students cleared NET/GATE exam in the last four years. Students also give University entrance test for Ph.D. program. Around 5-6 students have taken teaching as carrier. Two M.Sc students have joined in state services. Paramedical students joined in private and govt. organizations.

5.1.8 What type of counselling services are made available to the students (academic, personal, career, psycho-social etc.)

College has Academic, SC/ST welfare, placement and other cells to meet the problems of students. The admission, cell members counsel the students and selecting the course. Academic committee, gives details of academic, curricular co-curricular information. Class coordinator monitors their class students and make note of problems, if any. With the help of Principal and management the physco- social counseling is provided.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

College has Placement and Student Welfare cell, with Ms. Shelly Jain as convener and Dr. Madhu Gupta, Mr. Nishant Sharma, Dr. Rohit Shrivastava, Mrs. Jyoti Jain as members. They display latest advertisements for various jobs, research posts and competitive examinations of

related subjects are displayed. Most of the life science placements are done off campus only. Committee members give guidance to students in selecting the jobs

5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Yes, college has students grievance redressal cell. The college has placed complain boxes in the college. Any student wish to give their grievance can drop written complaint in the box. Students also can directly discuss the matter with class coordinator, or present as suggestion in the parent teacher meeting. These are discussed in the committee meetings or in staff meetings.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

Institute (under Jan Vikas Nyas) has VISHAKHA committee to monitor complaints related to sexual harassment. The members of the committee are-

- Dr. Archana Shrivastav, CLS
- Dr. O.P. Shukla, CHRI
- Dr. Meenu Rai, CLS
- Prof. Renuka Das, PGCN
- Dr. G. Tejovathi , CLS
- Dr. Kiswar Sultana, CHRI
- Dr. Nidhisha Agarwal, CHRI
- Dr. Manisha Kulshrestha, CHRI
- Dr. Madhu Gupta, CLS
- Dr. Sunita Bhargava, CLS
- Prof. Jaishree Ajith, PGCN
- Mrs. K.G. Nair, CHRI
- N.G.O. Member

So far, no complaint has been received in this regard in the institution.

5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes. There is an anti - ragging committee under convenership of Dr.Sunita Bhargava in the

college. So far, no complaint of ragging was reported in the college.

5.1.13 Enumerate the welfare schemes made available to students by the institution.

Scholarships – Post-metric scholarship for SC/ ST and OBC students, book bank Scheme for SC/ ST/ OBC students, free medical checkup

5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

Yes. College has alumni association and efforts are made by them to get registered. Two of the alumni are members of our IQAC committee. Registration at web site is available. They-

- help us in placement/ training of students.
- Participate in various events held in the college
- Motivate students by their lectures ideas.
- They give suggestions in development of academic & infrastructure facilities.
- They also help research scholars in scientific work.
- Alumni members have supported college in starting e- journal

CLS family whats app group and Alumni maha kumbh whatsapp are formed and this help interacting people with one another, exchanging views , information among alumni members.

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Student progression	%
UG to PG	75%
PG to M.Phil.	NA
PG to Ph.D.	40%
Employed • Other than campus recruitment	

Most of the students, who passed out, after PG, opt for teaching career or for Ph.D. and students who do not pursue Ph.D or join in industries. Paramedical courses students join private and government organizations for job.

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.

Following are the details of the program-wise percentage and completion rate for the last 4 years

Program	2010-11	2011-12	2012-13	2013-14
M.Sc. Biochemistry	35%	No admissions	No admissions	No admissions
Biotechnology		100%	66.7%	No admissions
Microbiology			85.7%	100
DMLT	66.7%	20%	63.6%	66.7%
CT-MRI		53.3%	25%	
ultrasound		100%		
B.Sc.	84.3%	74.5%	94.4%	95%

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

As the college is the oldest research centre in two subjects for doctoral and post-doctoral degree: To facilitate research the college has good library, ICT Facility, around four research supervisors, who contribute in pursuing Higher standard of research. Following is the list of research Supervisors:

Dr. B.R. Srivastav	: Biotechnology & Biochemistry
Dr. Meenu Rai	: Biochemistry & Biotechnology
Dr. Archana Srivastav	: Microbiology, Biochemistry & Biotechnology
Dr. G.Tejavathi	: Biotechnology, Botany, Microbiology

Entrepreneur development cell organizes training programs in for own industry.

Students of Paramedical courses are guided to take up job in hospitals or diagnostic centres.

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

To prevent drop-out and failure special support provided by the college is special classes for weak students, personal counseling by class coordinators, subject guidance by the subject teacher, provision to improve performance in CCE by providing more than one chance.

5.3 Student Participation and Activities

5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

Range of activities available to the students they are: **Annexure- 6**

Sports – athletics, football, volleyball, cricket, kho-kho, chess, carom, Table Tennis

Extracurricular activities – NSS (one units with 25 volunteers) Eco - Club, Cyber-club, Entrepreneur club, Poetry Writing and Recitation, Extempore Elocution, Debate, Mehendi, Cooking, Clay modeling, Spot Painting, Poster Making, Rangoli, Collage, solo & group song, Quiz, Dance (Solo & Group).

5.3.2 Furnish the details of major student achievements in co- curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

Mr. Shekhar Bhadauria, B.Sc. III semester attended NSS programs in 2014-15. B. Sc III semester students participated in National level seminar/ conferences and presented oral / poster presentations.

5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

College collects feedback on prescribed proforma provided. The inputs received are analyzed and used for the improvement of the quality of the institution.

5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.

Students take part in the college wall magazines. These are hand written or developed from the printed materials, displayed on the notice board. College has recently started e-journal entitled "contemporary issues in Biotechnology". Training students in project work, research scholars, staff can publish their work in this journal. Also develops e-magazine, released trimonthly, gives all the information on circular, extracurricular activities achievements of students and staff

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

The college had Student Union till 2011. Class representative were elected on the basis of merit. They in turn, elected four office-bearers: President, Vice- President, Secretary, Joint Secretary. Posts for girls were reserved alternatively. After 2011, college students council is formed by electing class representatives on the basis of merit. No office bearers are elected.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

Student representatives in various committees are as follows –

S.No.	Committee Name	Student members
1	Academic	Ms. Ritu Namani Mr. Shekhar bhadauria
2	Anti ragging	Ms. Bhagyansi Pathak Mr. Devansh Raj
3	Examination	Mr. Pushpendra Singh Ms. Ankita Jain
4	General Information, Discipline & maintenance	Ms. Sushmita Ms. Ayushi Singhal
5	Placement and Student Welfare	Ms. Pallavi Agarwal Ms. Bhayanshi Pathak
6	SC/ST Cell	Mr. Jitendra Rajput Mr. Vishal Kushwah
7	Library Advirsary	Mr. Ram Prajapati Mr. Abhishekh Singh Tomar
8	Alumni	Mr. Ram Prajapati Ms. Sonam Gupta

9	Annual Report / Bulletin Magazine & Quarterly News letter	Ms. Kajal Taneja Ms. Licky Verma
10	Cultural	Ms. Prachi Rathor Ms. Ankita Jain
11	Sports	Mr. Ravindra Prajapati Ms. Rinu Vergis
12	Excursion & Transport	Mr. Pushpendra Mr. Rajesh
13	IQAC	Mr. Ravindra Prajapati Ms. Himani Sharma
16	Admission	Ms. Bhagyansi Pathakh Mr. Satish Patidhar
14	Publicity	Ms. Renu Praja pati Ms. Priya Goyal

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

Two alumni are members of our IQAC committee. We regularly call the alumni and former faculty members on special occasions to deliver lectures and give their valuable suggestions to the students. Any other relevant information regarding Student Support and Progression which the college would like to include.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Leadership ensures that the vision and mission of the institution are in tune with the objectives of the Society and students.

See information 1.1.1.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The Principal is the administrative and academic head of the institution who acts on the behalf of the Trust, Jan Vikas Nyas. Under the able guidance of the Chairman of the governing body, Dr. B.R. Srivastav, Principal implements policies of the laid in the objectives of the college with thw support of its staff. She co-ordinates with all the stake holders for effective administration of the college.

6.1.3 What is the involvement of the leadership in ensuring :

- **the policy statements and action plans for fulfillment of the stated mission**

The Principal being the Head of the Institution apprises the faculty about the vision and mission of the college at the beginning of the academic session. She informs the new policies, projects and process of the Trust and makes effective plans for implementation.

- **formulation of action plans for all operations and incorporation of the same into the institutional strategic plan**

The action-plan is formulated to meet the academic and co-curricular betterment of the students. The academic calendar Developed by the college strictly followed.

- **Interaction with stakeholders**

As the college is an affiliated college of Jiwaji University, it has very limited and indirect role in planning of the academic programs. As the syllabus is given by the affiliated University or Paramedical council, Bhopal , college has very limited stake in modifications. All the suggestions of stake holders on syllabus frame work are passed on to the University through the members of Board of studies. Feedback received from stake holders is used in framing the future modifications for the betterment of the quality in education.

Regarding implementation and evaluation, faculty and students involve members of various college committees which review the performance of the different programs of the institution.

The curricular and co-curricular transactions are made effective through the close and consistent co-operation of faculty, students and administrative staff. Various committees of the institution discuss and evaluate programs and policies pertaining to overall development of the students.

- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**

The members of Governing Body of the college, IQAC, Alumni association, Different college committees get an opportunity to give their views regarding academic programs and co-curricular activities. Their suggestions are considered by the college management for effective functioning.

- **Reinforcing the culture of excellence**

The feedback received from students and the other stake holders are examined by the principal and faculty. They are conveyed to the decision making bodies. They take these suggestions in to account to meet future educational needs and challenges. The institution ensures good relations with students and society-.

By Student and society centric approaches, infrastructural facilities, experienced faculty, personality improvement and job opportunity oriented policies, through latest methods of teaching, continuous evaluation of the students and their performance etc.

- **Champion organizational change**

Under the guidance of Chairman of the College Dr. B.R. Srivastav, College committees, IQAC plays crucial role in championing organizational change.

See information given in section of SWOC Analysis of the Institution

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

The Head of the Institution, along with Governing Body, Heads of the Departments and with IQAC, plans and implements policies for betterment of the teaching-learning procedure. The institution also takes feedback of the students. Thus, the institute adopts a participatory approach and involves every stakeholder in shaping the future of the college. The college submits its performance report to the Chairman annually.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

The Principal is the Head of the Institution. She along with college management provides guidance and works cohesively for the enhancement of quality of education in the college.

6.1.6 How does the college groom leadership at various levels?

The college grooms leadership by delegation of power and by aspects of the functioning of college. The faculty members, the librarian, the sports officer, Chairman and the management committee, the members of different college committees who work responsibly for the institution. The participation of the faculty and the Heads of the Departments in decision making processes groom them for leadership role.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

The Principal is the administrative head of the institution. The administrative, and managerial issues of the college are decided by the Principal through chairman and college Management trust. The functions of the institution are carried out through committees (eg. Advisory committee, Planning committee, Discipline committee, Purchase committee etc.) in a participatory manner. The major administrative decisions are taken in the meetings of governing body, trust management committee. Teaching, evaluation and feedback system are initiated by individual departments with the help of IQAC to enhance the quality of education.

6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes, the college promotes a culture of participative management. Major decisions are taken in Staff Meetings. There are 18 committees to regulate different administrative activities of the college. Faculty and students are widely represented in these committees. The advisory committee of the Principal and Heads of the Departments discuss and implement policy decisions. various administrative committees of the college are-

- IQAC
- Admission
- Academic
- RAC
- Anti ragging
- Election
- Examination
- General Information, Discipline & maintenance
- Placement and Student Welfare
- SC/ST Cell
- Library Advirsary
- Alumni
- Annual Report / Bulletin Magazine & Quarterly News letter
- Cultural
- Sports

- Excursion & Transport
- Website up loading
- Purchase
- Publicity
- Vishakha Women Harasment cell

6.2 Strategy Development and Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes. The founder trustee Sri. Shitla Sahai has laid down the policies of the college along with the members of Jan Vikas Nyas trust. The Principal is the administrative and academic head of the institution who acts on the behalf of the trust. She is the authority responsible for the implementation of policies of the college. She, with the help of- Present Chairman of management, Dr. B.R. Srivastav, and members of management and governing body, co-ordinates with all the stake holders for effective administration of the college. The Governing body comprising of representatives of management, staff, affiliation University suggestions. The staff members play an important role in effective implementation of policy and plans. The IQAC of the college formulates strategy to enhance the performance of the students and faculty.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes. To upgrade college to the status of excellence in life science courses and develop labs for research and diagnosis, to serve the society. They are Development of Molecular diagnostic lab, Construction of extra floor for class rooms, laboratories, construction of seminar hall, Green house, herbal garden.

6.2.3 Describe the internal organizational structure and decision making processes.

The College ensures a system of participative management whereby information flow and decision making processes are channeled through all key constituents of the College. The suggestions given by the Staff in the staff meetings, Governing Body, the Management Committee and the Finance Committee are implemented under the leadership and guidance of the Principal.

6.2.4 Give a broad description of the quality improvement strategies of the institution

for each of the following

- **Teaching & Learning**

The innovative and interactive teaching etc. are implemented.

The progress of the students is monitored through Class test, internal exams, final semester exams performance. To upgrade and update knowledge, faculty members are motivated to participate in academic activities, training programs, faculty development programs etc.

- **Research & Development**

The College is a recognized Research Centre for Doctoral research in 2 subjects.

Workshops and seminars are organized regularly and faculties are also encouraged to participate in research activities organized by other institutions. Following are the research activities undertaken by the college in last four years.

- **Community engagement**

NSS unit of the college, eco club, and sister institutes organized events are participated by the students. So far, more than 100 students participated in various events. All the activities are organized according to the calendar developed by the college

- **Human resource management**

Guest faculty are arranged from different sources. The sister institute such as CHRI, PGCN and SSIMS help us conducting theory and practicals in the Paramedical courses, various guest faculty from outside and research scholar are also utilized in the UG and PG courses.

- **Industry interaction**

College has last year started industrial interaction by applying for collaborative project to BIRAC, DBT.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

The feedback received from all stakeholders is discussed in the staff meetings of college. The outcome is in turn communicated to the college management. The College sends periodic and annual reports regarding academic and administrative activities to the management.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The college management, Principal interact, encourage and guide the staff to ensure the effective growth of the college. The needs, problems and requirements for educational and infrastructural reforms are discussed in college management, governing body and trust meetings.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

Management committee has decided to expand the college by constructing another floor to accommodate classes and labs. The work is in progress. Up grading of Biotechnology lab in to Molecular Diagnostics was proposed and it is in progress.

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?

Yes. The Institution has not applied for autonomy.

6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stake holder relationship?

The college has displayed complaint boxes in the college. Any stakeholder can drop written grievances, that will be taken out by students welfare committee. The matters are discussed and remedy is worked out.

Similarly stake holders also can give their views during parents- teacher meet or anytime telephonically. The record of these is maintained.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute ? Provide details on the issues and decisions of the courts on these?

There are no court cases filed by or against the institute.

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the

institution to such an effort?

Yes, the College received feedback from students regarding institution. The general perception of students was positive. Some complaints regarding facilities are taken up and rectified.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

The institution promotes professional development of the faculty to the greatest possible extent. The plan fund is utilized for professional development. Faculty members of the institution actively participate in national and international seminars and conferences within India. The institution encourages faculty members to enroll for and provide resources for training programs and workshops. Eight faculty members worked / working on major and minor research projects. Staff are provided computer training program. For faculty empowerment the Institution motivates the staff to undertake Faculty Development Programs (Orientation Course, Refresher Course, Computer Training etc.).

6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

The institute has given staff freedom to attend training programmes of their interest.

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

To evaluate performance it is mandatory for the staff to submit duly filled college CR form. It has been revised according to PBAS of UGC. It takes into account all the information on multiple activities of the individual.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

The review of the Performance Appraisal is a two-tier process'. The duly filled forms are appraised by the Head of the Institute followed by the Principal.

6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

Teaching	EPF & ESI
Non teaching	EPF & ESI
Students	Free medical checkup Facilities at CHRI

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

College is self financed and Private college, hence, staff are given freedom to take up government and other jobs . At the same time the staff of good quality are given opportunity to raise in their academic qualification by providing facilities for research, applying for projects, attending workshop and conferences etc.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

There is a well-established mechanism for efficient use of financial resources.

To efficiently monitor the financial administration of the institution, there is a Financial officer and finance department , common for all the institutes running under Jan Vikas Nyas. They department takes care of monitor effective and efficient use of available financial resources.

Every year buget estimate for institute is planned. Under the supervision of Director of the collage & present chairman of Jan Vikas Nyas, Dr. B.R. Srivastav,Principal of the College takes financial approval and is utilized as per the procedure of Jan vikas Nyas. Funds obtained through fee etc.are collected and deposited in the finance section by Mr. Sailendra Singh, from CLS office. Finance committee, store & purchase sections of trust help in spending and maintaining, saving the money. Part of the funds required for the college are obtained from the trust ' Jan Vikas Nyas'

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

Internal audit of the college finances are done by registered Chartered accountant every year. These are submitted to income tax office.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

Major source of funds are fee from the students. The college expenditure is partly financed by the Jan vikas Nyas trust. Audited reports of income expenditure are enclosed as **Annexure V**.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The College does not receive any kind of donation or receive any financial help.

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

- a. Has the institution established an Internal Quality Assurance Cell (IQAC)? .6 If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

Yes. The college has established IQAC in 2004. It maintain quality in teaching, learning and research. It has evolved a feedback mechanism from all its stakeholders.

Our policy with regard to quality assurance is:

- To sustain and enhance quality of the teaching-learning process.
- To identify the strengths and weaknesses of the institutions and work accordingly.
- To promote research environment and research activities in the campus.
- To prepare students for development of society and job prospects

- b. **How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?**

IQAC is committed towards the holistic development of the students and growth of the institution.

It has evolved mechanism to receive feedback and analysis. It motivates the faculty members to engage in research. Most of the decisions of the IQAC have been implemented. The staff and the faculty members are always cooperative with the IQAC

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes, the IQAC has three community representatives, two alumni members and three management representatives on its committee. These review the work already done and provide timely guidance.

d. How do students and alumni contribute to the effective functioning of the IQAC?

The IQAC committee interacts with the students and the alumni to get suggestions for improving the academic and co-curricular activities. The institution, the IQAC always tries to incorporate the view of the students and the alumni in making and implementing schemes for the curricular, extra-curricular and administrative activities of the institution. Alumni help students in finding the placement, guide for further studies and also fund college. There are two student representatives in the college committees. The college has a distinguished records of well-placed alumni.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

There are time-to-time meetings with the staff members for efficient implementation of the decisions.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.

Yes, the institution has an integrated framework for quality assurance of the academic and administrative activities. The continuous comprehensive evaluation of students, the feedback received from students, CR of faculty, college meetings are some of the mechanisms developed by the institution. For quality assurance, the college has an Internal Quality Assurance Cell, different college level committees. All academic and administrative issues are discussed and reviewed by the staff in respective committee meetings and after approval, are sent for adaption/implementation. The academic activities and co-curricular activities are conducted and monitored by respective committees.

The College has initiated several mechanisms such as CCE, Assignments and daily presentations, weekly presentations in the academic activity. Open book system, coding system are adopted this years for the evaluation of the students performance. Co-curricular activities organized by NCC, Committee for cultural activities and sports activities work for the holistic development of students.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

For quality assurance, the IQAC motivates its staff to undergo training programs: regarding computer literacy; To use new ICT technology.

Computer literacy has increased and the staff is very efficiently using the tools available like PowerPoint Presentations and Excell, and other software.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

Yes, the institution undertakes academic audit. The performance of the students is evaluated through class tests, their classroom performance and university exams. The result of the students have been more than very good, exhibiting the improved performance of the students. The Academic Committee and the IQAC analyzes the results and makes further plans to improve the performance. Special classes are arranged for weak students.

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The external regulatory authorities are:

- Jiwaji University
- Department of Higher Education
- Para medical council Bhopal
- Jabalpur medical council Bhopal

The Institute aligns with these agencies according to the needs.

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of

operations and outcome?

The IQAC, the College Academic Council review the teaching learning process.

The Head of the Department make regular assessment of the students with the help of teachers, based on the attendance, participation in the class, marks received in class tests and interaction with the parents. Parents-teacher meetings are regularly held to assess the performance. The College has class coordinators for the benefit of the students

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The institution communicates its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders through parents teacher meetings, alumni meet, annual reports and the College Prospectus.

Any other relevant information regarding Governance Leadership and Management which the college would like to include : No

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Campus contains more than 1500 plants. No chemical pollutions are released into air. Eco-club members help in keeping campus “green campus and clean campus.” And No –polythene

zone.

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

- Energy conservation : The construction of the college building is such that the it is aerated and needs use of electric lights. Minimum energy is used. Managements see that no wastage of electricity is done.
- Use of renewable energy : girls' hostel is equipped with solar water heaters
- Water harvesting : presently no, after construction is completed it will be installed.
- Check dam construction : no, There is no natural water body around the college
- Efforts for Carbon neutrality : Mostly students come by walking or in share auto up to the college, thus reduce the pollution.
- Plantation : Each year regularly, plantation is done in the campus and its surroundings by teachers and students and other staff by organizing shram dan. Adopting a tree plant also made part of this program. Environment club and NSS actively participates in these events. On Pitru parvath, tree plantation in the name of our beloved once, is encourage. This can be done by anybody, including the citizens of Gwalior.
- Hazardous waste management : College does not produce hazardous waste.
 - e-waste management : Limited use of CD and DVD is encouraged. Use of pendrive, storage in inter net and drop boxes, exchanging information through net are encouraged, so that e- waste can be avoided.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

The college has adopted student-oriented policies by which it constantly work for the solutions to the needs and problems of the students. Community and society development are the part of the mission and vision of the college, hence, college organizes various community services alone or ialong with its sister institute CHRI. Resently it has organized free Physiotherapy camp along with CHRI and in collaboration with inner wheel organization. Time to Time College organizes blood donation campus.

Special classes for weak and slow learners are organized. College has adopted coding system

and Open book system in the internal and class tests for the improvement of students' performance. NSS wing of the college along with its sister institute organizes and participates in number of community services such as blood donation camp, Anti-tobacco campaign, Awareness programs on cancer, AIDs, camps for physiotherapy. NSS wing also works for the development of the rural area, education. Independence day, Republic Day, Republic day parade, Surya Namaskar, Teacher's Day, World Student's Day, Sadbhavana divas. All festivals such as- Holi, Navratri, Depawali, Ganesh ustav, new year are celebrated by all the staff and students of CLS with Jan vikas Nyas family.

Yoga, March past, indoor and out door games are organized among, CLS, sister institutes and also some times inter college Diagnosis and treatment facilities for the all the family of Jan vikas Nayas are provided. Sri. Kulshreshth, retd. Judge, administrative , is also available for the staff for any legal advises.

7.3 Best Practices

7.3.1 Elaborate on any two best practices in the given format at page no. 98, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

Best Practice 1

Title of the Practice: **Society / Community related Service**

The Context:

Number of pockets in the urban areas of Gwalior and Chambal regions are under developed. People from arrounding areas of CLS visit our sister institute CHRI & SSIMS for treatment. They need awareness on hyGINE and health related matters. In this context, the College plans and executes programs for community development to support the neighbourhood through NSS wing, Eco club, and its sister institutes.

Goal: The Goal of community service is:

- Students are motivated to spread awareness on hyGINE, health in the community .
- To Support neighbourhood community in environment protection.
- To create awareness among students to play an important role in nation-building by active participation in social work.

Success

Environment protection & conservation

- Environment Protection and improvement, Awareness Campaign & other programs
- Special Programs environment
- Slogan – ‘Green campus Clean campus’ (follow the PM campaign) “Swachchha Campus Abhiyan”
- Members nomination – 15108115
- Oath ceremony – 12/09/15
- Awareness programme - No Polythene - 26/09/15
(Relly and other mode) Use Dustbins - 29/09/15
Plants & their uses - (Plantation)
- To display the various slogan of improvement
- Eradication of Parthenium (Gajar ghans) - 03/10/15
- Recycling of Agro-residues to control the pollution (Mushroom activation)
- To promotes the students for self employment by the using of Plant residues for the cultivation of edible mushroom.
- Plantation of medicinal plants.
- Presentation or various aspects of Environment related topics i.e. pollution, medicinal aspects & other home remedies. (delivered by Eco-Club member)
- Time to time poster presentation on environment related topics.
- Swachchha Campus compain from 3rd Nov. to 5th Nov. 2015.

Health related programs

- Health services- Blood check up and blood donation
- Blood Donation Camp was organized by the NSS Unit in every year on blood donation day and sometimes also on NSS day
- Visit to Madhav Ophenage home.
- Tobacco nirnulaw complain in no tobacco day.
- Cancer awareness programs.
- AIDS awareness society especially youth by presentation, model competition under red ribbon club.
- Free heart check up
- Blood donation camp
- Environment protection
- Plantation of trees on ‘pitru parvath’ and surrounding areas of the institution

Evidensess of success

More than 500 students participated in various community services. More than 150 students

donated blood in last four years

Problems

Still people in the community are less supportive to students on support and implementation of community services. Raising of funds for the programs is highly difficult.

Best Practice 2

Title of the Practice :**Innovations in teaching & research practises.**

Context

With fast development and advancement in the medical and life sciences fields, students are lacking in the skills at UG,PG and Research levels. Lack of knowledge in practical skills resulting in lack of job opportunity.

Goal

- Inculcate theoretical and practical knowledge in students
- Improving communicating skills and presentation skills of the students
- Motivating students for best skill development. Through placement , Entrepreneur cells
- Class room teaching in morning presentations
- Assignment writing in given topics,
- Model preparation
- Participation in wall magazine and other scientific programs
- Quiz

Success

- Faculty supervises Ph.D. students in Biotechnology, Biochemistry and Microbiology subjects in topics related to health and environment.
- Successfully conducting Training programs for UG and PG students
- Training program on water quality testing was conducted by Chemistry Department.
- Under placement , Entrepreneur cells following events were successfully conducted.
- Establishment of mushroom cultivation house – in 2011
- Lecture delivered in various institution to promote the U.G. & P.G. student for self employment
- Organised a one day to one week training programme organized by dept of Botany on preparation of Bonsai & scaping on 18th Sep. 2015.

- In house training programme on various aspects of edible mushroom from 2011 to till now.
- Recycling of plant residues to minimize the pollution.
- Utilization of waste papers for the cultivation of mushroom.
- “Spawn” preparation of mushroom for financial support – 2013 & 2014
- Training received – from 2011 to 2015 October from various departments
 - 2011 - 88 UG Candidate (21 in house, 47 other institution)
 - 2012 - 09 UG Candidates (other institutions)
 - 2014 - 29 UG (Other Institution)
 - 2014 - 19 PG (Other Institution)
 - 2015 - 07 PG (Other Institution)
 - 2015 - 26 UG (Other Institution)
 - Total - 128 Candidates.
- Dissertation/ training given at Biotechnology/ Microbiology Departments

S.No.	Year	M.Sc. Student Dissertation	B.Sc. /B.Tech. student Training	Organizations/Inst.	Students from MP
1	2010	79	05	Pt.RSS university(CG),Dr HS university, Amity University, Noida,Agra University, CSJM university, Kanpur,Jiwaji University	32
2	2011	81	06	Agra University, CSJM university, Kanpur,Jiwaji University,Barkatullah University,Bhopal(MP)	44
3	2012	43	07	Agra University, CSJM university, Kanpur,Jiwaji University,Barkatullah University,Bhopal(MP),VIT Vellore	46
4	2013	41	04	RBS college,Krishna college, Agra University, CSJM university, Kanpur,Jiwaji University,Barkatullah University	31
5	2014	15	03	RBS college,Krishna college, Agra University, CSJM university, Kanpur,Jiwaji University	14
6	2015	20	05	Agra University, CSJM university, Kanpur,Jiwaji University	11

Problems

Lack of time for the students in doing creative work due to present semester rsystem and discripencies in PL and examination schedules. Lack of funds for creating / providing latest

methods of training

3. Evaluative Report of the College

1. Name of the College : College of Life Sciences

Departments in the college : Microbiology

Biotechnology

Biochemistry

Botany

Chemistry

Zoology

Forensic Science

Food and Nutrition

Pharmaceutical Chemistry

Laboratory & departments of Paramedical Courses

2. Year of Establishment : College – 1990

Year of starting new courses

S.No	Department	Year of started
1.	Microbiology	1990
2.	Biochemistry	1990
3.	Biotechnology	2001
4.	Botany	2005
5.	Chemistry	2005
6.	Zoology	2005
7.	Forensic Science	2014
8.	Food and Nutrition	2014
9.	Pharmaceutical Chemistry	2014
10.	Paramedical Courses	Annexure II

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

S.No	Department/ subject	Courses offered
1.	Microbiology	M.Sc.; Ph. D
2.	Biochemistry	M.Sc.; Ph. D
3.	Biotechnology	M.Sc.; Ph. D

1.	*Microbiology	*B. Sc with special paper
1.	*Biochemistry	
2.	*Biotechnology	
3.	*Forensic Science	
4.	*Food and Nutrition	
5.	*Pharmaceutical Chemistry	
6.	*Bioinformatics	UG Degree Diploma; Certificate;
7.	Paramedical Courses	

4. Names of Interdisciplinary courses and the departments/units involved

4. Annual/ semester/choice based credit system (programme wise)

No credit system given by the university to undergraduate. At PG level credit system may start from 2016.

Sl. No.	Programme Level	Name of the Course	Annual/ semester Duration
1.	Under-Graduate B.Sc	B;BT:C; B:M:C; Bch: Z: C; BT: Z;C; B: PC:C; Z:M:C; Z: PC:C; BCh: B: C; PC: C:IM; PC:C:BT; Bioin: C:Z ;Bioi n: C: BT; T :C: FS; C: FN:M; C:FN:Z; BT: B: FN;BT:FN:Z; BT:FN:M; Bch: BT: FN; B:C:FS ;	Semester 03 years
2.	Ph. D	Microbiology ; Biochemistry; Biotechnology	4 years
3.	Post-Graduate	Biochemistry	Semester 2 years
		Microbiology	
		Biotechnology	
Paramedical courses			
4.	Degree	BPT	4 ½ years
5.	Certificate courses	Ultrasonnd	1 year
		OT technician	
		Hospital Records Sciences	
		CTMRI	
		ECG technician	
6.	Diploma	Medical Lab technician (DMLT)	2 years
		Anesthesia Technician	
		Dialysis Technician	

6. Participation of the department in the courses offered by other departments

All UG courses

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

No

8. Details of courses/programmes discontinued (if any) with reasons

Programs discontinued are Hospital record management; Human Nutrition, Response was poor.

9. Number of Teaching posts in each department

	Sanctioned	Filled	
		Subject	Number
Professors	01 each in Biochemistry, Microbiology, Bio-technology	Microbiology	01
		Biotechnology	01
Asst. Professors	02 in each department	Microbiology	03
		Biochemistry	02
		Biotechnology	03
		Botany	01
		Chemistry	01
		Forensic Science	01
		Food & Nutrition	01
		BPT	03

10. Faculty profile with name, qualification, designation, specialization

S. No.	Name	Designation	Qualification	Teaching Experience Years
1	Dr. Meeru Rai	Principal	M.Sc. Ph.D.	26
2	Dr. Tejovathi Gudipati	Vice Principal	M.Sc. Ph.D.	23
Department of Microbiology				
1	Dr. Archana Shrivastav	Professor HOD	M.Sc. Ph.D.	25
2	Mrs. Jyoti Jain	Assistant Professor	M.Sc. M.Phil, Ph.D	5
3	Ms. Shikha Sharma	Assistant Professor	M.Sc.	
4	Apurvi Tripathi	Assistant Professor	M.Sc.	
Department of Biotechnology				
1	Dr. Tejovathi Gudipati	Vice Principal HOD	M.Sc. Ph.D.	23
2	Dr. Abhinav Shrivastava	Assistant Professor	M.Sc. NET	11

3	Mr. Santosh Yaduvanshi	Assistant Professor	M.Sc.	6
4	Mr. Nishant Sharma	Assistant Professor	M.Sc.	6
Department of Biochemistry				
1	Dr. Neelima Shrivastava	Assistant Professor	M.Sc.	21
2	Mrs. Usha Duseja	Assistant Professor	M.Sc. DMLT Ph.D thesis submitted	8
Department of Chemistry				
1	Dr. Sunita Bhargava	Assistant Professor	M.Sc. Ph.D.	14
Department of Botany				
1	Dr. Madhu Gupta	Assistant Professor	M.Sc. Ph.D. M. Phill	16 Years 11 month
Department of Zoology				
V A C A N T				
Department of Food & Nutrition				
1	Ms. Shelly Jain	Assistant Professor	M.Sc.	6 months
Department of Forensic Science				
1	Dr. Rohit Shrivstava	Assistant Professor	BHMS, PGDFS	6 months
Non-Teaching				
1	Mr. Umesh Singh Kushwah	Librarian	M.A., M. Lib. M. Phil	11 Years
2	Mr. Shailendra Singh Bais	Lab Technician	M.Sc., M.A.	7 Year

8. List of senior visiting faculty

- ★ Dr. A.M. Jana, Retd. Scientist, Dept. of Virology, DRDE, Gwalior
- ★ Dr. Vinod Dingra, Scientist, Forensic Science Department, Gwalior
- ★ Faculty from CHRI as visiting faculty

Name	Designation
Dr. Rajiv Sagwaria	Assistant Professor
Dr. Sanjeev Gupta	Assistant Professor
Dr. Manisha Kakkar	S.R. Pathology
Dr. Anjula Jain	Associate Professor
Dr. V. Jalaj	Assistant Professor
Dr. Neeraj Sharma	Assistant Professor
Dr. Nadeem Ahmad Sarwat	Assistant Professor

Dr. K. Sultana	Associate Professor
Dr. Rajni Agrawal	Assistant Professor
Dr. Priya Runwal	Assistant Professor
Dr. M.K. Pathak	Assistant Professor
Dr. Mrs. Nidhisha Agarwal	Assistant Professor
Dr. Omendra Bhooshan	Senior Resident, ENT
Dr. Amit Deewan	Associate Professor
Mr. Shailendra Singh Bais	Technician
Mr. Manoj Saxena	Technician
Mr. Jitendra Gupta	Technician
Mr. Dheeraj Singh Kushwah	Technician
Mr. Susheel Bhargava	Technician
Mr. Anurag Shrivastava	Sr. Technician
Mr. S.R. Jadhav	Technician
Mr. Paras Shukla	Technician
Ms. Krishna Sen	Technician
Ms. Dashrath Singh Baghel	Technician
Mr. Mukesh Batra	Technician
Mrs. Kirti Sharma	Technician

9. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

Course	% lectures/practicals delivered by visiting faculty
B. Sc.	05%
M.Sc	12.5%
Paramedical Courses	70%

10. Student -Teacher Ratio (programme wise)

B. Sc.	8.5 : 1
M. Sc	3 : 1
BPT	8 : 1

11. Number of academic support staff (technical) and administrative staff; sanctioned and filled

S. No.	Name of Staff	Designation
1.	Mr. Shailendra Singh Bais	Technician

2.	Mr. Rajesh Sahai	L.D.C.
3.	Mr. Sushil Bhatnagar	Computer Operator & Office Work
4.	Mr. Rakesh Pal	Computer Operator & Office Work
5.	Mr. Ramkishan Kushwah	Peon
6.	Mr. Ajmer Singh	Peon

12. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Ph. D, M. Phil and M. Sc.

13. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

One – National approx. 1.34 Lacs

14. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Approx. 8.50 Lacs

15. Research Centre /facility recognized by the University

For Biochemistry; Microbiology

16. Publications:**17. a) Publication per faculty**

- * Number of papers published in peer reviewed journals (national /international) by faculty and students

53

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

All Departments

- * Monographs : Nil
- * Chapter in Books : 01
- * Books Edited : Nil
- * Books with ISBN/ISSN numbers with details of publishers : 01

- ★ Citation Index : 2 - 243
- ★ SNIP : Nil
- ★ SJR : Nil
- ★ Impact factor : 0.45 – 9.88
- ★ h-index : 04

20. Areas of consultancy and income generated

Nil

21. Faculty as members in

a) National committees :

b) International Committees : Nil

c) Editorial Board : 03

Dr. Archana Srivastav, Dr. Tejovathi Gudipati, Dr. Madhu Gupta

22. Student projectsa) **Percentage of students who have done in-house projects including inter departmental/programme**b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies****23. Awards / Recognitions received by faculty and students****24. List of eminent academicians and scientists / visitors to the department****25. Seminars/ Conferences/Workshops organized & the source of funding**a) **National** : 04 Seminars/ Conferences; 01 workshopb) **International** : Nil**26. Student profile programme/course wise:**

Programmes	Year	Number of applications	Number of students admitted	Demand Ratio
UG- B.Sc.	2012	16	13	
	2013	07	07	
	2014	62	60	
	2015	41	39	

PG-Biotechnology	2012	07	07	
	2013	01	01	
	2014	02	02	
	2015	-	-	
PG-Microbiology	2012	08	07	
	2013	05	04	
	2014	06	04	
	2015	07	07	
Paramedical courses	2012	38	38	
	2013	23	23	
	2014	81	81	
	2015	In progress		

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
M.sc Microbiology	100	nil	nil
M.Sc Biotechnology	nil	nil	nil
B.sc	98	02	nil
Paramedical	In progress		

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

07

29. Student progression

Student progression	Against % enrolled
UG to PG	Approx 10%

PG to Ph.D.	Approx 03%
Ph.D. to Post-Doctoral	Nil
Employed • Campus selection • Other than campus recruitment	Nil
Entrepreneurship/Self-employment	

30. Details of Infrastructural facilities**a) Library****b) Internet facilities for Staff & Students****c) Class rooms with ICT facility****d) Laboratories**

See section 4

31. Number of students receiving financial assistance from college, university, government or other agencies

51 (2014-15)

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

See section 3.1.6

33. Teaching methods adopted to improve student learning

Black board teaching, OHP, LCD projector

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

See section 4.1.2

35. SWOC analysis of the department and Future plans

See section of SWOC Analysis

Annexure-I

No.F.G-33/96(CPP-I) 49 MAR 1997 Annexure -

The Registrar,
Jiwaji University,
Gwalior,
(M.P.).

25 MAR 1997

Sub: List of Colleges prepared under Section-2(f) of the
UGC Act, 1956-Inclusion of New Colleges.

Sir,

I am directed to refer to letter No.27/96/3539 dated
6.2.97 on the above subject and to say that the name of the
following college has been included in the above list under
Non-Government college teaching upto Post-Graduate Degree:-

Name of the College	Year of Estt.	Remarks
College of Life Sciences Center Hospital and Research Institute, Gwalior (M.P.)-474009.	1990	The College is eligible to receive central assistance in terms of the rules framed under Section-12-B of the UGC Act, 1956.

Dr. (S. Jolly)

The Indemnity Bond and other documents in respect of the
above college have been accepted by the Commission.

Yours faithfully,
(Signature)
(B.S. Mahota)
Under Secretary

Forwarded to:-

- The Director, College of Life Sciences Center Hospital and
Research Institute, Gwalior (M.P.)-474009.
- The Secretary, Government of India, Ministry of Human
Resource Development, Department of Education, T-14 Section,
New Delhi-110001.
- Joint Secretary, UGC Central Regional Office, Tawa
Complex (Bittan Market), E-5, Area Colony, Bhopal-462016.
- All Officers/Sections in the UGC Office.
- S.O. (T-III/CD-II Section), UGC, New Delhi.
- Hard file.

07
4/4/97

(C.P. Arora)
Section Officer

Annexure II

चिकित्सा शिक्षा विभाग
मंत्रालय, वल्लभ-भवत, भोपाल

"आदेश"

भोपाल, दिनांक 20/02/2014

क. ए. 5-756/2013/1/55 : राज्य-शासन द्वारा मध्यप्रदेश सह-शिक्षितरीय परिषद अधिनियम, 2000 (कमर्सिक 1. सन् 2001) की धारा-24 के अन्तर्गत प्रदत्त शक्तियों को प्रयोग करते हुए (JAN VIKAS NYAS) द्वारा संचालित, COLLEGE OF LIFE SCIENCES CANCER HOSPITAL & RESEARCH INSTITUTE, GWALIOR को ग्वालियर जिले में निम्नानुसार विषय तथा प्रवेश संख्या के आधार पर शिक्षण-सत्र 2013-2014 (एक वर्ष) के लिए पैरामेडिकल पाठ्यक्रम संचालित करने की सशर्त अस्थायी अनुज्ञा प्रदान की जाती है :-

सं.क्र.	पाठ्यक्रम का नाम	डिग्री / डिप्लोमा / प्रमाण-पत्र पाठ्यक्रम	स्वीकृत सीट
01	BACHELOR OF PHYSIOTHERAPY	DEGREE	50
02	ANESTHESIA TECHNICIAN	DIPLOMA	50
03	HUMAN NUTRITION	DIPLOMA	50
04	DIALYSIS TECHNICIAN	DIPLOMA	50
05	MEDICAL LAB. TECHNICIAN	DIPLOMA	50
06	X-RAY RADIOGRAPHER TECHNICIAN	DIPLOMA	50
07	E.C.G. TECHNICIAN	CERTIFICATE	50
08	O.T. TECHNICIAN	CERTIFICATE	50
09	HOSPITAL RECORD SCIENCES	CERTIFICATE	50
10	ULTRA SOUND TECHNICIAN	CERTIFICATE	50
11	C.T.M.R.I. TECHNICIAN	CERTIFICATE	50

आवश्यक निर्देश :-

01. संस्था को परिषद के समस्त नियम-विनियम अनुसार प्रवेश तथा अन्य कार्यवाही सम्पन्न कर परिषद द्वारा जारी पाठ्यक्रम अनुसार शिक्षण करवाना होगा। पैरामेडिकल पाठ्यक्रमों में संस्था द्वारा परिषद द्वारा निर्धारित अंतिम तिथि 20 फरवरी, 2014 तक छात्रों के प्रवेश किए जा सकेंगे।
02. मध्यप्रदेश सह-शिक्षितरीय परिषद के नियम-विनियम अनुसार निर्धारित संख्या द्वारा महाविद्यालय में उपयुक्त / योग्य शैक्षणिक स्टाफ को नियुक्ति सत्र प्रारंभ होने के पूर्व की जाना आवश्यक होगा तथा परिषद को यथाशीघ्र सूचित किया जाएगा।
03. संस्था द्वारा परिषद द्वारा बनाए गए प्रवेश नियमों के अनुसार ही छात्रों के प्रवेश की कार्यवाही की जाएगी।
04. शासन / परिषद की ओर से समय-समय पर किए जाने वाले सामान्य एवं आकस्मिक निरीक्षण के दौरान संस्था द्वारा आवश्यक सहयोग किया जाएगा।
05. संस्था को उपरोक्त समस्त पाठ्यक्रमों में प्रवेशित छात्रों की विषयवार सत्यापित सूची (छात्र का नाम, पिता / पति का नाम, शैक्षणिक अर्हता, प्रवेशित पाठ्यक्रम का नाम, प्रवेश का एवं दिनांक, निवास का पता आदि) निर्धारित तिथि तक म.प्र. सह-शिक्षितरीय परिषद को आदेश जारी होने के एक सप्ताह के भीतर अनिवार्य रूप से सी.डी. सहित उपलब्ध करानी होगी। निर्धारित तिथि के पश्चात् निम्नानुसार परिषद प्रतिदिन प्रति छात्र एक हजार के बिलम शुल्क प्राप्त कर सकेंगी। डाक एवं अन्य कार्यों से विलम्ब के लिए राज्य-शासन एवं म.प्र. सह-शिक्षितरीय परिषद की कोई जवाबदारी नहीं होगी।
06. संस्था द्वारा प्रवेशित छात्रों की सूची परिषद कार्यालय में जमा करते समय शासन द्वारा जारी इस आदेश की छायाप्रति सलग्न करना अनिवार्य होगा।
07. मध्यप्रदेश सह-शिक्षितरीय परिषद द्वारा पैरामेडिकल पाठ्यक्रमों के लिए निर्धारित अधिकतम शिक्षण शुल्क के अनुसार ही संस्था को कार्यवाही करना आवश्यक होगा।
08. उपरोक्त आदेश जारी होने के एक सप्ताह के भीतर संस्था को परिषद के पक्ष में स्नातक स्तर की बैंक गारण्टी (चुनौती पैसा) अथवा दो बरों निर्धारित कर मूल प्रति म.प्र. सह-शिक्षितरीय परिषद को प्रस्तुत करना आवश्यक होगा।
09. डिग्री, डिप्लोमा पाठ्यक्रमों में प्रवेश के पूर्व संस्था को सम्बन्धित विश्वविद्यालय से सम्बद्धता प्राप्त करना आवश्यक होगा।

10. मध्यप्रदेश सह-चिकित्सीय परिषद अधिनियम, 2000 (क्रमांक 1, सन् 2001) की धारा 44(1) एवं (2) में उल्लेखित प्रावधानों के परिप्रेक्ष्य में, सह-चिकित्सीय पाठ्यक्रम उत्तीर्ण अभ्यर्थियों को परिषद में नामांकन (पंजीयन) हेतु संस्था स्तर से समस्त आवश्यक कार्यवाही किया जाना सुनिश्चित किया जाए। इस प्रकार संस्था से उत्तीर्ण छात्रों को म.प्र. सह-चिकित्सीय परिषद में नामांकन (पंजीयन) की सम्पूर्ण जवाबदारी संस्था की होनी।
11. मध्यप्रदेश सह-चिकित्सीय परिषद अधिनियम, 2000 (क्रमांक 1, सन् 2001) की धारा 31(1), (2) एवं (3) में उल्लेखित प्रावधानों के परिप्रेक्ष्य में, "संस्था में पूरे किए जाने वाले पाठ्यक्रम और बी जाने वाले परीक्षा अध्याय उसके द्वारा ली गई परीक्षा में अभ्यर्थियों से अपेक्षित प्रवीणता या, संस्था में कर्मचारिवृत्त, उपस्कर, वास्तु-सुविधा, प्रशिक्षण तथा उसमें दिए जाने वाले शिक्षण और प्रशिक्षण की अन्य सुविधाएँ परिषद द्वारा विहित स्तरों के अनुरूप नहीं पाए जाने पर" सह-चिकित्सीय संस्था को बी गई मान्यता / अनुमति किसी भी समय समाप्त की जा सकती।
12. निवृत्ति समयावधि में बैंक गारण्टी की प्रति मध्यप्रदेश सह-चिकित्सीय परिषद में प्रस्तुत नहीं करने पर संस्था द्वारा प्रवेशित छात्रों को परिषद द्वारा आयोजित परीक्षाओं में सम्मिलित नहीं किया जाएगा।
13. मध्यप्रदेश सह-चिकित्सीय परिषद द्वारा संस्था में एक वर्षीय पाठ्यक्रमों में प्रवेशित छात्रों के ऑनलाइन नामांकन की व्यवस्था की गई है। जब परिषद को निवृत्ति तिथि तक प्रवेशित छात्रों की उपलब्ध करायी जाने वाली सूची अनुसार ही छात्रों के ऑनलाइन नामांकन किए जाएंगे। इस प्रकार संस्था द्वारा परिषद को अंतिम तिथि तक प्रवेशित छात्रों की उपलब्ध करायी गयी सूची ही अंतिम प्राप्ति जाकर आगामी कार्यवाही की जावेगी तथा इसमें किसी भी प्रकार का संशोधन सम्बन्धी अम्बिगुइटी पर विचार नहीं किया जाएगा।

मध्यप्रदेश के राज्यपाल के नाम से
तथा अधिशानुसार,

(अभिज्ञा भागवत)
अवर सचिव,
मध्यप्रदेश शासन
चिकित्सा शिक्षा विभाग

भोपाल, दिनांक 20/02/2014

पृष्ठ F. 5-224/2013/1/55.

प्रतिलिपि :- सूचनार्थ एवम् आवश्यक कार्यवाही हेतु :-

- 01- निल सचिव, माग. मंत्री जी, चिकित्सा शिक्षा, मध्यप्रदेश शासन, वार ईमली, भोपाल।
- 02- आयुक्त, कसुप, मध्यप्रदेश, भोपाल।
- 03- आयुक्त, ग्वालियर संभाग, ग्वालियर।
- 04- आयुक्त, उच्च शिक्षा मध्यप्रदेश, भोपाल।
- 05- कन्सेप्टर, जिला ग्वालियर।
- 06- अधिकाता, स्वराजी कहराठवा चिकित्सा महाविद्यालय, ग्वालियर।
- 07- कुलसचिव, बीबीजी विश्वविद्यालय, ग्वालियर।
- 08- कुलसचिव, मध्यप्रदेश वायुर्विज्ञान विश्वविद्यालय, जबतपुर।
- 09- मुख्य चिकित्सा एवम् स्वास्थ्य अधिकारी, जिला ग्वालियर।
- 10- प्रधानाचार्य, स्वशासी आयुर्वेद महाविद्यालय, ग्वालियर।
- 11- सिविल सर्जन सह मुख्य अस्पताल अधीक्षक, ग्वालियर।
- 12- अर्थक्षेत्र सह जिला आयुर्वेद अधीक्षक, ग्वालियर।
- 13- जिला संयोजक, आर्य समाज कल्याण, ग्वालियर।
- 14- रबिन्द्रार, मध्यप्रदेश सह-चिकित्सीय परिषद, प्लेटिनम प्लाजा, माता मन्दिर रोड, भोपाल।
- 15- संचालक, कालेज ऑफ लाईफ साइन्सेस (जन विकास न्यास) मान्दे की माता, कौसर हिल्स, जिला ग्वालियर (मध्यप्रदेश)
- 16- अधिशाहीन।

(अवर सचिव)
अवर सचिव,
मध्यप्रदेश शासन
चिकित्सा शिक्षा विभाग

मध्यप्रदेश शासन
चिकित्सा शिक्षा विभाग
मंत्रालय, वल्लभ भवन, भोपाल
आदेश

क्र. एफ - 36/2013/1/55

भोपाल, दिनांक

राज्य शासन द्वारा मध्यप्रदेश सह-चिकित्सीय परिषद अधिनियम 2000 (क्रमांक 1, सन 2001) तथा धारा-24 के अन्तर्गत प्रदत्त शक्तियों को प्रयोग में करते हुए कैंसर हॉस्पिटल रिसर्च इंस्टीट्यूट द्वारा संचालित कॉलेज ऑफ लाईफ साइन्सेस ग्वालियर को ग्वालियर जिले में निम्नानुसार विषय तथा प्रवेश संख्या को आधार पर शिक्षण सत्र 2014-15 (एक वर्ष) के लिए पैरामेडिकल पाठ्यक्रम संचालित करने को सख्त अस्थायी अनुज्ञा प्रदान की जाती है।

क्र.	पाठ्यक्रम का नाम	डिग्री/डिप्लोमा/ प्रमाण-पत्र पाठ्यक्रम	स्वीकृत सीट
01	BACHELOR OF MEDICAL LAB TECHNICIAN	DEGREE	50
02	MEDICAL LAB TECHNICIAN	DIPLOMA	50
03	X-RAY RADIO GRAPHER TECHNICIAN	DIPLOMA	50
04	ULTRA SOUND TECHNICIAN	CERTIFICATE	50
05	C.T.M.R.I.	CERTIFICATE	50

आवश्यक निर्देश:-

- संस्था को म.प्र. सह-चिकित्सीय परिषद के समस्त नियम-विनियम अनुसार प्रवेश तथा अन्य कार्यवाही संपन्न कर परिषद द्वारा जारी पाठ्यक्रम अनुसार शिक्षण करवाना होगा। पैरामेडिकल पाठ्यक्रमों में संस्था द्वारा परिषद द्वारा निर्धारित अंतिम तिथि 15 फरवरी 2015 तक छात्रों के प्रवेश किए जा सकेंगे।
- मध्यप्रदेश सह-चिकित्सीय परिषद के नियम-विनियम अनुरूप निर्धारित संख्या द्वारा महाविद्यालय में उपयुक्त/योग्य शैक्षणिक स्टाफ की नियुक्ति सत्र प्रारंभ होने के पूर्व की जाना आवश्यक होगा तथा परिषद को यथाशीघ्र सूचित किया जाएगा।
- संस्था द्वारा म.प्र. सह-चिकित्सीय परिषद द्वारा बनाये गये प्रवेश नियमों के अनुसार ही छात्रों के प्रवेश की कार्यवाही की जावेगी।
- शासन/परिषद की ओर से समय-समय पर किए जाने वाले सामान्य एवं आकस्मिक निरीक्षण शासन/परिषद द्वारा आवश्यक सहयोग किया जाएगा।
- संस्था को उपरोक्त समस्त सह-चिकित्सीय पाठ्यक्रमों में प्रवेशित छात्रों की विषयवार सत्यापित सूची (छात्र का नाम, पिता/पति का नाम, शैक्षणिक अर्हता, प्रवेशित पाठ्यक्रम का नाम, प्रवेश क्र. एवं दिनांक, जन्मतिथि, निवास का पता, जाति, मूल निवासी, आदि) निर्धारित तिथि तक म.प्र. सह-चिकित्सीय परिषद को दिनांक 28 फरवरी 2015 तक अनिवार्य रूप से सी. पी. सहित उपलब्ध करानी होगी। निर्धारित तिथि के पश्चात् नियमानुसार परिषद प्रतिदिन प्रति छात्र एक हजार का विलम्ब शुल्क प्राप्त कर सकेगी। डाक एवं अन्य कारणों से विलम्ब के लिए राज्य शासन एवं म.प्र. सह-चिकित्सीय परिषद को कोई जबाबदारी नहीं होगी।
- संस्था द्वारा प्रवेशित छात्रों की सूची परिषद कार्यालय में जमा करते समय शासन द्वारा जारी इस आदेश की छायाप्रति संलग्न करना अनिवार्य है।
- मध्यप्रदेश सह-चिकित्सीय परिषद द्वारा पैरामेडिकल पाठ्यक्रमों के लिए निर्धारित अधिकतम शिक्षण शुल्क के अनुसार ही संस्था को कार्यवाही करना आवश्यक होगा।
- सम्परोक्त आदेश जारी होने के एक सप्ताह के भीतर संस्था को म.प्र. सह-चिकित्सीय परिषद के पक्ष में पौंच लाख की बैंक गारंटी (न्यूनतम वैधता अवधि दो वर्ष) निष्पादित कर मूल प्रति म.प्र. सह-चिकित्सीय परिषद को सौंप कर आवश्यक होगा।

9. डिप्लोमा सह-चिकित्सीय पाठ्यक्रमों में छात्रों के प्रवेश के पूर्व संस्था को संबंधित विश्वविद्यालय से संबंधता प्राप्त करना आवश्यक होगा।
10. मध्यप्रदेश सह-चिकित्सीय परिषद अधिनियम 2000 (क्रमांक 1, सन 2001) की धारा-44 (1) एवं (2) में उल्लेखित प्रावधानों के परिपेक्ष्य में सह-चिकित्सीय पाठ्यक्रम उत्तीर्ण अभ्यर्थियों को परिषद में नामांकन (पंजीयन) हेतु संस्था स्तर से समस्त आवश्यक कार्यवाही विज्ञा जाना सुनिश्चित किया जाए। इस प्रकार संस्था से उत्तीर्ण छात्रों को मध्यप्रदेश सह-चिकित्सीय नामांकन (पंजीयन) की सम्पूर्ण जबाबदारी संस्था की होगी।
11. मध्यप्रदेश सह-चिकित्सीय परिषद अधिनियम 2000 (क्रमांक 1, सन 2001) की धारा-33 (1) (2) एवं (3) में उल्लेखित प्रावधानों के परिपेक्ष्य में संस्था में पूरे किए जाने वाले पाठ्यक्रम और दी जाने वाली परीक्षा अथवा उसके द्वारा ली गई परीक्षा में अभ्यर्थियों से अपेक्षित प्रवीणता या संस्था में कर्मचारीवृन्द, उपस्कर, वास-सुविधा, प्रशिक्षण तथा उसमें दिये जाने वाले शिक्षण और प्रशिक्षण की अन्य सुविधाएं मध्यप्रदेश सह-चिकित्सीय परिषद द्वारा विहित स्तरों के अनुरूप नहीं पाए जाने पर सह-चिकित्सीय संस्था को सह-चिकित्सीय पाठ्यक्रमों के संचालन बाबत दी गई अनुज्ञा/मान्यता किसी भी समय समाप्त की जा सकेगी।
12. निर्धारित समयवधि में बैंक गारंटी की प्रति मध्यप्रदेश सह-चिकित्सीय परिषद में प्रस्तुत न करने पर संस्था द्वारा सह-चिकित्सीय पाठ्यक्रमों में प्रवेशित छात्रों को परिषद द्वारा सह-चिकित्सीय पाठ्यक्रमों में प्रवेशित छात्रों को परिषद द्वारा आयोजित परीक्षा में सम्मिलित न किया जाएगा।

मध्यप्रदेश के राज्यपाल के नाम से
तथा आदेशानुसार,

(शर्मिला ठाकुर)

अवर सचिव

मध्यप्रदेश शासन

चिकित्सा शिक्षा विभाग

भोपाल, दिनांक 13/2/15

Principal
College of Life Sciences
or Hospital Research Institute
Gwalior (M.P.)

एफ 5-236/2013/1/55

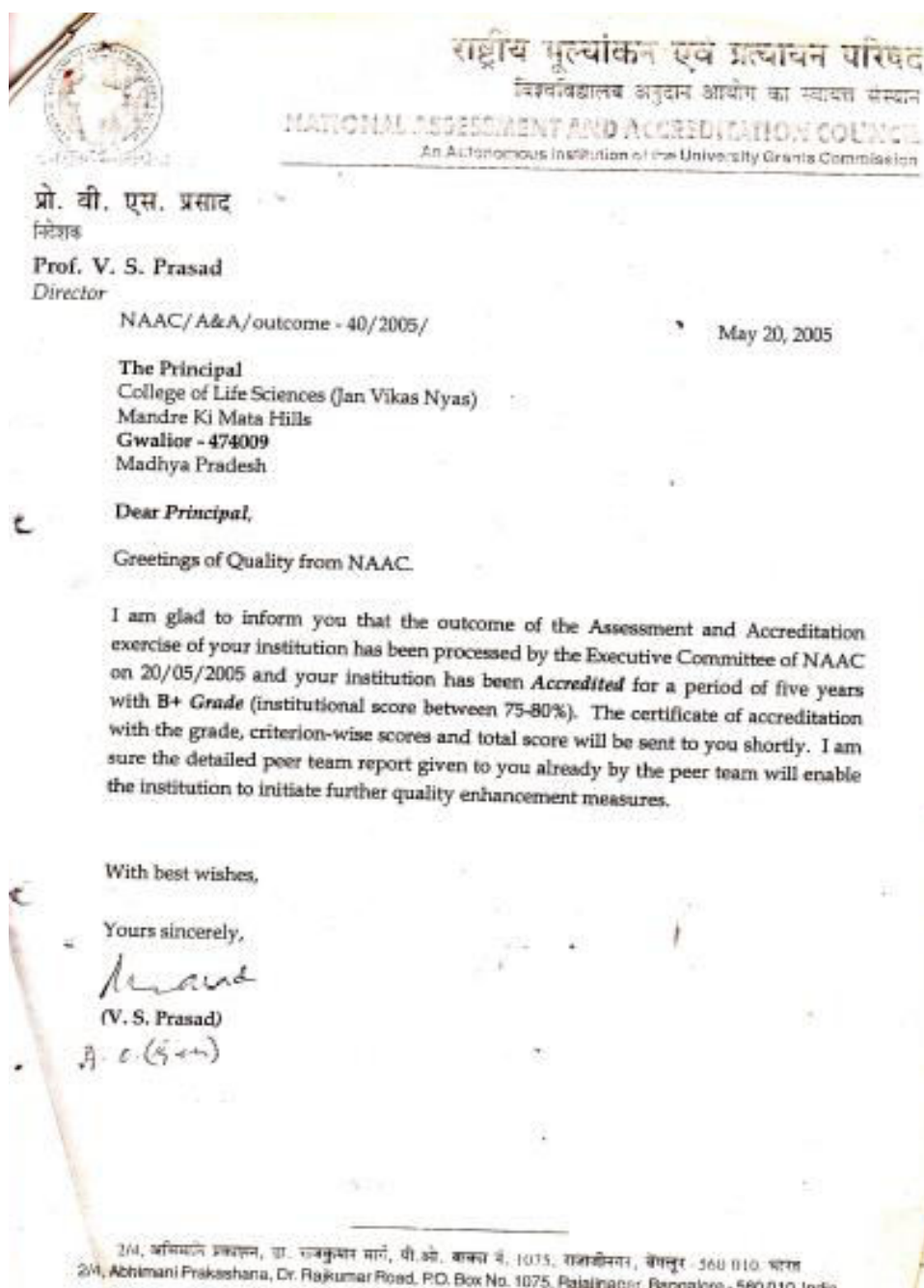
सूचनार्थ एवं आवश्यक कार्यवाही हेतु :-

1. विशेष सहायक, मान. मंत्री जी, मध्यप्रदेश शासन चिकित्सा शिक्षा विभाग, भोपाल
2. प्रमुख सचिव, मध्यप्रदेश शासन, आदिम जाति कल्याण विभाग, मंत्रालय, भोपाल
3. आयुक्त, उच्च शिक्षा, मध्यप्रदेश, भोपाल
4. आयुक्त, आयुष, मध्यप्रदेश, भोपाल
5. आयुक्त, ग्वालियर संभाग, ग्वालियर।
6. कलेक्टर, जिला- ग्वालियर।
7. कुलसचिव, मध्यप्रदेश आयुर्विज्ञान विश्वविद्यालय, जबलपुर।
8. कुलसचिव, जीवाजी विश्वविद्यालय, ग्वालियर।
9. अधिष्ठाता, गर्जाराजा चिकित्सा महाविद्यालय, ग्वालियर।
10. मुख्य चिकित्सा एवं स्वास्थ्य अधिकारी, जिला- ग्वालियर।
11. सिविल सर्जन सह मुख्य अस्पताल अधीक्षक जिला- ग्वालियर।
12. जिला संयोजक, आदिम जाति कल्याण जिला- ग्वालियर।
13. रजिस्ट्रार मध्यप्रदेश सह-चिकित्सीय परिषद, तृतीय तल, प्लेटिनम प्लाजा, भोपाल
14. Director, National Information Center, Madhya Pradesh, State Center Vindhyaachal Bhawan, Bhopal
15. संचालक, कॉलेज ऑफ लाईफ साइन्सेस, मांडरे की गाता, हिल्स, ग्वालियर।
16. आदेश फाईल

अवर सचिव

मध्यप्रदेश शासन

Annexure III



Annexure IV



Statement of Budget Estimate During 2011-12
for College of Life Sciences

S.NO.	Particular of Head of A/c	Budget Estimates for 2011 - 12	Expenditure for 2011-12	Remarks
1	2	3	4	5
	Recurring Expenditure			
1	Pays & Allowances	250000.00	2186590.00	
2	Provision for PF	200000.00	119560.00	
3	Travelling Exps.	10000.00	225.00	
4	Postage & Telegram	4000.00	3823.00	
5	Advertisement & Publicity	40000.00	19515.00	
6	Audit Fee	15000.00	11030.00	
7	Sports	5000.00	21601.00	
8	Newspaper & Periodicals	5000.00	3544.00	
9	Conference & Workshop	15000.00	300.00	
10	Affiliation Fee	400000.00	406619.00	
11	Inspection Fee	2000.00		
12	Electric Charges	200000.00	74273.00	
13	Remuneration		95750.00	
14	Chemical & Surgical	100000.00	81142.00	
15	Internet/Tele/Fax	15000.00	21769.00	
16	Printing Charge	20000.00	11447.00	
17	Maintenance & Repairs of			
	(a) Equipment	50000.00	37588.00	
	(b) Furniture	3000.00	5000.00	
	(c) Building material	20000.00		
18	Misc Expenditure	50000.00	30716.00	
19	Bank Charges	15000.00	2914.00	
20	Stationary Expenditure	20000.00		
21	Honorarium/Remuneration	100000.00		
22	AMC	20000.00		
23	POL Expenditure	5000.00		
24	Exam Fee	20000.00	3332.00	
	A. Total Recurring	3834000.00	3136828.00	
	Non Recurring Expenditure			
1	Purchase of Furniture	200000.00		
2	Books & Journals	200000.00	72780.00	
3	Equipment/Computer	200000.00	26491.00	
4	Construction of Building	50000.00	6350.00	
5	Establishment of Cell culture lab	1450000.00		
	B. Total Non Recurring Exp.	2100000.00	105621.00	
	(A+B) Grand Total	5934000.00	3242449.00	

Annexure Vb

Statement of Budget Estimate During 2012-13 for College of Life Sciences				
S.NO.	Particular of Head of A/c	Budget Estimates for 2012 - 13	Expenditure for 2012-13	Remarks
1	2	3	4	5
	Recurring Expenditure			
		250000.00	2326171.00	
1	Pays & Allowances	1500000.00	122997.00	
2	Provision for PF	10000.00	8390.00	
3	Travelling Exps.	5000.00	4261.00	
4	Postage & Telegram	100000.00	79444.00	
5	Advertisement & Publicity	15000.00	14382.00	
6	Audit Fee	10000.00		
7	Sports	5000.00	3472.00	
8	News Paper & Periodicals	5000.00	427.00	
9	Conference & Workshop	500000.00	326406.00	
10	Affiliation Fee	5000.00		
11	Inspection Fee	200000.00	109301.00	
12	Electric Charges			
13	Water Charges	25000.00	20000.00	
14	Software	15000.00	15433.00	
15	Internet/Tele/Fax	25000.00	23418.00	
16	Printing & Stationary Charge			
17	Maintenance & Repairs of			
	(a) Equipment	30000.00	28490.00	
	(b) Furniture	30000.00	26522.00	
18	Misc Expenditure	200000.00	199710.00	
19	Bank Charges	2000.00	1669.00	
20	Honorarium/Remuneration	100000.00	84900.00	
21	AMC	15000.00	13276.00	
22	POI Expenditure	5000.00		
23	Exam Fee	10000.00		
	A. Total Recurring	5312000.00	3408669.00	
	Non Recurring Expenditure			
		200000.00	199890.00	
1	Purchase of Furniture	20000.00		
2	Books & Journals	200000.00	134929.00	
3	Equipment/Computer			
4	Construction of Building	420000.00	334819.00	
	B. Total Non Recurring Exp.	5732000.00	3743488.00	
	(A+B) Grand Total			

Annexure Vc

Statement of Budget Estimate During 2013-14
for College of Life Sciences

S.NO.	Particular of Head of A/c	Budget Estimates for 2013 - 14	Expenditure for 2013-14	Remarks
1	2	3	4	5
	Recurring Expenditure			
1	Pays & Allowances	300000.00	195647.00	
2	Provision for PF	15000.00	120346.00	
3	Travelling Exps.	10000.00	44455.00	
4	Postage & Telegram	10000.00	4482.00	
5	Advertisement & Publicity	100000.00	42140.00	
6	Audit Fee	20000.00	18724.00	
7	Sports	10000.00		
8	News Paper & Periodicals	5000.00	5756.00	
9	Conference & Workshop	5000.00	222610.00	
10	Affiliation Fee	500000.00	312096.00	
11	Inspection Fee	5000.00		
12	Electric Charges	200000.00	101800.00	
13	Water Charges	20000.00		
14	Software	50000.00	3776.00	
15	Internet/Tele/Fax	20000.00	24565.00	
16	Printing & Stationary Charge	30000.00	13243.00	
17	Maintenance & Repairs of			
	(a) Equipment	50000.00	12195.00	
	(b) Furniture	30000.00		
18	Misc Expenditure	300000.00	133550.00	
19	Bank Charges	2000.00	19308.00	
20	Honorarium/Remuneration	100000.00	39000.00	
21	AMC	20000.00		
22	PGL Expenditure	5000.00		
23	Exam Fee	10000.00		
	A. Total Recurring	4652000.00	3074463.00	
	Non Recurring Expenditure			
1	Purchase of Furniture	500000.00		
2	Books & Journals	20000.00		
3	Equipment/Computer	200000.00	15100.00	
4	Construction of Building			
	B. Total Non Recurring Exp.	720000.00	15100.00	
	(A+B) Grand Total	5372000.00	3089563.00	

Annexure Vd

Statement of Budget Estimate During 2014-15
for College of Life Sciences

S.NO.	Particular of Head of A/c	Budget Estimates for 2014 - 15	Expenditure for 2014-15	Remarks
1	2	3	4	5
	Recurring Expenditure			
1	Pay & Allowances	300000.00	2300548.00	
2	Provision for PF	150000.00	146755.00	
3	Travelling Exps.	50000.00	47103.00	
4	Postage & Telegram	10000.00	439.00	
5	Advertisement & Publicity	100000.00	479123.00	
6	Audit Fee	30000.00	15000.00	
7	Sports	10000.00	6984.00	
8	News Paper & Periodicals	20000.00	3846.00	
9	Conference & Workshop	350000.00	8100.00	
10	Affiliation Fee	50000.00	940049.00	
11	Inspection Fee	5000.00		
12	Electric Charges	60000.00	110175.00	
13	Water Charges			
14	Chemical & Surgical	10000.00	86100.00	
15	Internet/Tele/Fax	30000.00	21072.00	
16	ESI	70000.00	63107.00	
17	Maintenance & Repairs of			
	(a) Equipment	50000.00	11221.00	
	(b) Furniture	10000.00	8068.00	
	(c) Building material			
18	Misc. Expenditure	200000.00	2048.00	
19	Bank Charges	15000.00	393.00	
20	Stationary & Printing Exp.	30000.00	16000.00	
21	Honorarium/Remuneration	100000.00	24100.00	
22	AMC	20000.00		
23	POI Expenditure	5000.00	300.00	
24	Exam Fee	10000.00	25950.00	
25	Legal Exp.	10000.00	1100.00	
26	Software	50000.00		
	A. Total Recurring	5055000.00	4328526.00	
	Non Recurring Expenditure			
1	Purchase of Furniture	500000.00		
2	Books & Journals	20000.00	17119.00	
3	Equipment/Computer	200000.00	137206.00	
4	Construction of Building			
5	Establishment of Solar System	2000000.00		
	B. Total Non Recurring Exp.	2720000.00	154325.00	
	(A+B) Grand Total	7775000.00	4482851.00	

यूको बैंक
जारी करने वाली शाखा
ER HOSPITAL GWALIOR BRANCH

UCO Bank
ISSUING BRANCH

कूट सं./CODE NO.
2047

केवल तीन महीने के लिए वैध VALID FOR THREE MONTHS ONLY
07-11-2015
D D M M Y Y Y Y

THE DIRECTOR NAAC

माँगे जानेपर ON DEMAND PAY को या उनको आदेश पर OR ORDER

रुपये RUPEES

One Lakh Fourteen Thousand

अदा करें। ₹ 1,14,000.00

only मूल्य प्राप्त VALUE RECEIVED

कृते यूको बैंक
For UCO Bank

***** Not Over INR. 1,14,000.00 *****

1827003

अदाकर्ता शाखा/DRAWEE BRANCH स. प्रबन्धक / Asst. MANAGER
(कार्मिक सं. / EMP. NO. 55481) (कार्मिक सं. / EMP. NO. 521857)

COD/16 BANGALORE SERVICE BRANCH 1827

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