

The Annual Quality Assurance Report (AQAR) of the IQAC  
**School of Biotechnology**

Part – A

**1. Details of the Institution**

1.1 Name of the Institution

School of Biotechnology

1.2 Address Line 1

Takshashila Campus

Address Line 2

Khandwa Road

City/Town

Indore

State

Madhya Pradesh

Pin Code

452001

Institution e-mail address

biotechdavv@gmail.com

Contact Nos.

0731-2470372 / 73

Name of the Head of the Institution:

Dr. Anil Kumar

Tel. No. with STD Code:

0731-2470372/73

Mobile:

+91-9425058373

Name of the IQAC Co-ordinator:

Dr. H. S. Parmar (on leave)  
Acting Co-ordinator: Ms. Nikita Chordia,  
Information Officer (+91-9685281822)

Mobile:

+91-9826536730 (Dr. H S Parmar)

IQAC e-mail address:

No separate email address. Institution email  
address can be used.

1.3 NAAC Track ID (For ex. MHCOGN 18879) **EC/66/RAR/146 dated 21-02-2014**

1.4 Website address:

<http://www.biotech.dauniv.ac.in/>

Web-link of the AQAR:

<http://www.iqac.dauniv.ac.in/>For ex. <http://www.ladykeanecollege.edu.in/AQAR201213.doc>

## 1.5 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	Four Star		20/09/2000	"Five Years"
2	2 <sup>nd</sup> Cycle	B grade	2.57 out of 4	16/09/2008	"Five Years"
3	3 <sup>rd</sup> Cycle	A	3.09	21 .2. 2014	"Five Years"
4	4 <sup>th</sup> Cycle	N.A	N.A	N.A	N.A

1.6 Date of Establishment of IQAC :

DD/MM/YYYY

21/11/2008

1.7 AQAR for the year (for example 2010-11)

2015-16

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011) Submitted

- i. AQAR \_\_\_\_\_ Feb 2013 June 2013 \_\_\_\_\_ (DD/MM/YYYY)4  
 ii. AQAR \_\_\_\_\_ 2013-14 \_\_\_\_\_ (DD/MM/YYYY)  
 iii. AQAR \_\_\_\_\_ 2014-15 \_\_\_\_\_ (DD/MM/YYYY)  
 iv. AQAR \_\_\_\_\_ (DD/MM/YYYY)

1.9 Institutional Status

University State  Central  Deemed  Private

Affiliated College Yes  No

Constituent College Yes  No

Autonomous college of UGC Yes  No

Regulatory Agency approved Institution Yes  No

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education  Men  Women

Urban  Rural  Tribal

Financial Status Grant-in-aid  UGC 2(f)  UGC 12B

Grant-in-aid + Self Financing  Totally Self-financing

1.10 Type of Faculty/Programme

Arts  Science  Commerce  Law  PEI (Phys Edu)

TEI (Edu)  Engineering  Health Science  Management

Others (Specify)

1.11 Name of the Affiliating University (for the Colleges)

## 1.12 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
University with Potential for Excellence	<input type="checkbox"/>	UGC-CPE	<input type="checkbox"/>
DST Star Scheme	<input type="checkbox"/>	UGC-CE	<input type="checkbox"/>
UGC-Special Assistance Programme	<input type="checkbox"/>	DST-FIST	<input type="checkbox"/>
UGC-Innovative PG programmes	<input type="checkbox"/>	Any other ( <i>Specify</i> )	<input type="checkbox"/>
UGC-COP Programmes	<input type="checkbox"/>		

**2. IQAC Composition and Activities**

2.1 No. of Teachers	<input type="text" value="02"/>
2.2 No. of Administrative/Technical staff	<input type="text" value="01"/>
2.3 No. of students	<input type="text" value="06"/>
2.4 No. of Management representatives	<input type="text" value="00"/>
2.5 No. of Alumni	<input type="text" value="02"/>
2.6 No. of any other stakeholder and community representatives	<input type="text" value="00"/>
2.7 No. of Employers/ Industrialists	<input type="text" value="00"/>
2.8 No. of other External Experts	<input type="text" value="00"/>
2.9 Total No. of members	<input type="text" value="11"/>

2.10 No. of IQAC meetings held

2.11 No. of meetings with various stakeholders:

No.

Faculty

Non-Teaching Staff

Students

Alumni

Others

No formal meetings have been arranged by the School of Biotechnology. Coordinator, IQAC for School of Biotechnology, Dr.H.S.Parmar (Currently Incharge- Ms. Niktia Chordia) discuss the various matters related to IQAC with faculty, students, alumni and others from time to time.

2.12 Has IQAC received any funding from UGC during the year?

Yes

No

If yes, mention the amount




2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos.

International

National

State

Institution Level

(ii) Themes

2.14 Significant Activities and contributions made by IQAC

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year \*

Plan of Action	Achievements

\* Attach the Academic Calendar of the year as Annexure.

2.15 Whether the AQAR was placed in statutory body

Yes

No

Management

Syndicate

Any other body

Provide the details of the action taken

## Part – B

## Criterion – I

**1. Curricular Aspects**

## 1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	01	00	00	00
PG	03	00	02	00
UG	00	00	00	00
PG Diploma	00	00	00	00
Advanced Diploma	00	00	00	00
Diploma	00	00	00	00
Certificate	00	00	00	00
Others	00	00	00	00
<b>Total</b>	04	00	02	00

Interdisciplinary				
Innovative				

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	03
Trimester	
Annual	

1.3 Feedback from stakeholders\* Alumni  Parents  Employers  Students   
(On all aspects)

Mode of feedback : Online  Manual  Co-operating schools (for PEI)

\*Please provide an analysis of the feedback in the Annexure

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

- In accordance to Choice based Grading System, to provide more choices to the candidates according to their area of interest.
- Curriculum development process is based on the recommendations of DBT, various experts from the academics, corporate sector and student's feedback on course content and design.
- Syllabi are finalized in the meeting of the Board of Studies

1.5 Any new Department/Centre introduced during the year. If yes, give details.

No

**Criterion – II****2. Teaching, Learning and Evaluation**

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
02	01	00	01	00

2.2 No. of permanent faculty with Ph.D.

02

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
0	1	00	0	0	0	0	0	0	0

2.4 No. of Guest and Visiting faculty and Temporary faculty

00

04

01

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	00	00	00
Presented	00	00	00
Resource Persons	00	01	00

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- ✓ Faculty teaches the advanced topics in more details using research articles.
- ✓ E-books and animations are used to teach various molecular signalling pathways

2.7 Total No. of actual teaching days during this academic year

172

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

No



2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

02	02	
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2.10 Average percentage of attendance of students

86%
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2.11 Course/Programme wise distribution of pass percentage :

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
M.Sc. Biotechnology	12	11	01	00	00	100%
M.Sc. Bioinformatics	05	01	04	00	00	100%
M.Sc. Genetic Engineering	14	04	10	00	00	100%

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes : Through Feedback from the students

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	
UGC – Faculty Improvement Programme	
HRD programmes	
Orientation programmes	
Faculty exchange programme	
Staff training conducted by the university	
Staff training conducted by other institutions	
Summer / Winter schools, Workshops, etc.	
Others	

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	00		00	
Technical Staff	01		00	

**Criterion – III****3. Research, Consultancy and Extension**

## 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

- Collaborations with the national and International institutes.
- Guest Lectures from scientists well reputed in national and International institutes.
- M.Sc. biotechnology program and Bioinformatics-sub-centre are funded by DBT, Govt. of India
- Hands on training programme sponsored by MP Biotechnology council from July, 20 to August 04, 2015
- School organized training programs of Senior Expert Service (SES) program, Germany. In 2015, Prof. Dr. Klaus H. Hoffmann (Bayreuth) came as expert for 20 days training program.
- School organized International Conference entitled ‘Emerging Challenges in Biotechnology, Human Health and Environment’ was organized on March 10-12 2016.

## 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	00	04	00	0
Outlay in Rs. Lakhs	00	~ 7 crores	0	0

## 3.3 Details regarding minor projects No minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number				
Outlay in Rs. Lakhs				

## 3.4 Details on research publications

	International	National	Others
Peer Review Journals	12	0	0
Non-Peer Review Journals	0	0	0
e-Journals	0	0	0
Conference proceedings	0	0	0

## 3.5 Details on Impact factor of publications:

Range  Average  h-index  Nos. in SCOPUS

## 3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	M.Sc. Biotechnology Program	DBT	~3 Crores	~3 Crores
	Bioinformatics sub-centre	DBT	~3 Crores	~3 Crores
	Characterization of lignocellulosic biomass for improved pretreatment technologies for ethanol production	DBT – Overseas Project	15 lacs	15 Lacs
	Indo-Argentina project ‘Development of novel chimeric glycoside hydrolases----- Lignocellulosic biomass’	DST, New Delhi	~9.84 lakhs	NA
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College				
Students research projects (other than compulsory by the University)				
Any other(Specify)				
Total				

3.7 No. of books published i) With ISBN No.  Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP  CAS  DST-FIST   
DPE  DBT Scheme/funds

3.9 For colleges Autonomy  CPE  DBT Star Scheme   
INSPIRE  CE  Any Other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences

organized by the  
Institution

Level	International	National	State	University	College
Number	01	00	0	0	0
Sponsoring agencies	UGC/DST				

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations International  National  Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs :

From Funding agency  From Management of University/College

Total

3.16 No. of patents received this year: Nil

Type of Patent		Number
National	Applied	
	Granted	
International	Applied	
	Granted	
Commercialised	Applied	
	Granted	

3.17 No. of research awards/ recognitions received by faculty and research fellows  
Of the institute in the year Nil

Total	International	National	State	University	Dist	College

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them

01

07

3.19 No. of Ph.D. awarded by faculty from the Institution

28

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF

0

SRF

0

Project Fellows

0

Any other

02

3.21 No. of students Participated in NSS events:

University level

0

State level

0

National level

0

International level

0

3.22 No. of students participated in NCC events:

University level

0

State level

0

National level

0

International level

0

3.23 No. of Awards won in NSS:

University level

0

State level

0

National level

0

International level

0

3.24 No. of Awards won in NCC:

University level

0

State level

0

National level

0

International level

0

3.25 No. of Extension activities organized

University forum

3

College forum

2

NCC

0

NSS

0

Any other

0

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- World Oceans Day
- Plantation Day
- Cleanliness Day (2<sup>nd</sup> October)

**Criterion – IV****4. Infrastructure and Learning Resources**

## 4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	~ 12000 + 8000 sq. m.	0		20000 sq. m.
Class rooms	04			04
Laboratories	11	00		11
Seminar Halls	01			01
No. of important equipments purchased ( $\geq$ 1-0 lakh) during the current year.	10	00		10
Value of the equipment purchased during the year (Rs. in Lakhs)				
Others				

## 4.2 Computerization of administration and library

Yes
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## 4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	~2500	~	50	~4 lakhs	2600	~1.5 Crore
Reference Books		1.0Crore				
e-Books						
Journals						
e-Journals						
Digital Database						
CD & Video						
Others (specify)						

## 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	60	02	On all computers					
Added								
Total	60	02						

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

No

4.6 Amount spent on maintenance in lakhs :

i) ICT

~0.50 lacs

ii) Campus Infrastructure and facilities

iii) Equipments

~2 lacs

iv) Others

~0.50 lacs

**Total :**

~3 lacs

**Criterion – V****5. Student Support and Progression**

## 5.1 Contribution of IQAC in enhancing awareness about Student Support Services

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## 5.2 Efforts made by the institution for tracking the progression

Every year our performance audit done by DBT advisory meeting and Coordinators meetings. Advisory committee consist of Vice-Chancellor, two academician (from outside the institution), one industry expert, one nominee of DBT, New Delhi, Head, Registrar, Finance Controller and faculty participate. Besides, during Viva-Voce, experts from outside the institutions also evaluate performance audit in terms of syllabus, course coverage and give suggestions at the end of each semester.

## 5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
	60	07	01 (Twas-DBT Fellow)

## (b) No. of students outside the state

23

## (c) No. of international students

01

Men	No	%	Women	No	%
	16	26.6		44	73.3

Last Year						This Year					
General	SC	ST	OB C	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
44	03	07	10	00	59	42	02	02	14	00	60

Demand ratio

Dropout %

## 5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Besides, during student and teacher meetings SBT makes the students aware to study, plan the strategies to crack competitive examinations including NET, GATE, ICMR and specific exams for premier research institutes. Department hosted workshop and conference on Fostering research excellence at University level.



No. of students beneficiaries

## 5.5 No. of students qualified in these examinations

NET  SET/SLET  GATE  CAT

IAS/IPS etc  State PSC  UPSC  Others

## 5.6 Details of student counselling and career guidance

Mentors are appointed for each student for academic, life, social and career counselling. Any time any where students can ask any query any guidance.

No. of students benefitted

## 5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
01	04	01	14

## 5.8 Details of gender sensitization programmes

No programmes

## 5.9 Students Activities

## 5.9.1 No. of students participated in Sports, Games and other events

State/ University level  National level  International level

No. of students participated in cultural events

State/ University level  National level  International level

## 5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level  National level  International level

Cultural: State/ University level  National level  International level

#### 5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	0	
Financial support from government		Fees refunded to SC/ST/OBC
Financial support from other sources	24(JNU-DBT)	3000 pm to each student
Number of students who received International/ National recognitions	0	

#### 5.11 Student organised / initiatives

Fairs : State/ University level  National level  International level

Exhibition: State/ University level  National level  International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed:

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## Criterion – VI

### 6. Governance, Leadership and Management

#### 6.1 State the Vision and Mission of the institution

##### VISION

To address the major educational, economic, social and cultural needs of the Nation, for professional empowerment of the youth, by extending equal opportunity to all sections of the society, with increased thrust on access, equity and individual commitment of its faculty and staff, for teaching-learning, research and ethics.

##### MISSION

- ✓ To produce world-class professionals with excellent analytical, communication skills, team building spirit and ability to work in cross-cultural environment.
- ✓ To develop knowledgeable professionals with the ability to do research and solve the problems in their area of study.
- ✓ To inculcate professional ethics among youths to serve mankind and society.

#### 6.2 Does the Institution has a management Information System

No

#### 6.3 Quality improvement strategies adopted by the institution for each of the following:

##### 6.3.1 Curriculum Development

Department uses the feedback as indicator of the overall quality of the teaching and learning and using this indicator the required changes implemented

##### 6.3.2 Teaching and Learning

School conducts regular meeting of students and teachers and teacher-parents, to understand the differential need of students and their interests. Different methods are used to make students understand some complex topics by analysing their abilities.

##### 6.3.3 Examination and Evaluation

Feedback was on an average Good. However, strategies to further improving PG programmes made through departmental committee

##### 6.3.4 Research and Development

The working ambience of department is such that students and faculty are actively engaged in research, as evident by research publications. School emphasizes on developing working abilities on stand alone as well as in a group/ team. Besides, University also constituted task force for Fostering Excellence in Research which take care of departments and also conduct research audit.

## 6.3.5 Library, ICT and physical infrastructure / instrumentation

All of our students are well aware about the emerging technology due to their curriculum where sufficient components are IT and scientific technologies are incorporated. Our students use various database, online tools and videos for practical and research. In fact, faculty teach through research articles and further the students review more literature on the same on their own research interest and understand the process of researching.

## 6.3.6 Human Resource Management

School has trained the staff and students in such a manner that everyone can serve any work and due to this versatility in the staff and students the department is running smoothly in hassle free environment.

## 6.3.7 Faculty and Staff recruitment

University is advertising one vacant post of Lecturer (SC) and requested three non-teaching positions (out of 248 posts planned through University) for Department.

## 6.3.8 Industry Interaction / Collaboration

- ✓ School conducted guest lectures by Industrialists for the students.
- ✓ We are also having National and International Collaborations

## 6.3.9 Admission of Students

More advertisement is required with more emphasis on placement profile of alumni's.

## 6.4 Welfare schemes for

Teaching	
Non teaching	
Students	

## 6.5 Total corpus fund generated

6.6 Whether annual financial audit has been done  Yes  No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic				
Administrative				

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes  No

For PG Programmes Yes  No

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

The Examination pattern we follow is as per the Ordinance 31 of the university which was renewed collectively.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

Ordinance 31 provides academic and evaluation function autonomous to the school.

6.11 Activities and support from the Alumni Association

6.12 Activities and support from the Parent – Teacher Association

6.13 Development programmes for support staff

6.14 Initiatives taken by the institution to make the campus eco-friendly

**Criterion – VII****7. Innovations and Best Practices**

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

Freedom of research to Master's students and versatility for nature of jobs to everyone

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

*\*Provide the details in annexure (annexure need to be numbered as i, ii,iii)*

7.4 Contribution to environmental awareness / protection

- We also implicated green policy out of which Environment, cleanliness and oceans day were celebrated to spread awareness day.
- We also teach the subject as Environment Biotechnology to our students

7.5 Whether environmental audit was conducted? Yes  No

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

Strengths:

- International and National collaborations
- Students placement in National and International Institutions, companies
- Renowned Professor heading the School research laboratories
- Access of each laboratory for everyone.
- Student participation in policy decisions.

Weaknesses:

- Requirement of additional permanent teaching faculties.
- Supporting and administrative staff needs to be appointed.
- Present University and State Govt. rules are out of context and needs to be in line with International practices.
- Decreasing number of students pursuing Science.
- Shrinking of opportunities in the area of Biological sciences.

Opportunities:

- International and National collaborations will improve research standards and opportunities to students.
- Research skills and aptitude of faculty and students will further improve the quality of teaching and research.
- Sandwich Ph.D. programme of various funding agencies will be beneficial to start the consultancy services from Corporate.
- Adjunct Faculty positions of funding agencies like DST can improve teaching standards.
- International fellowships for the Faculty will enhance the communication and research skills further.
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Challenges:

- Recruitment of permanent faculty members is an urgent need of the department.
- Procedural delay should be greatly improved.
- Proper implementation of leave rules required to avail research fellowships.
- Institutional subscription required to access National and International research journals.
- Lack of motivation for science among students.

**8. Plans of institution for next year**

- Development of laboratory equipments (minor) and furniture facilities in newly constructed extension of the building.
- Development of Web Based Research Model
- Organization of Summer Programs for Teacher / students
- Organization of Seminars, Conferences and Workshops at State, National and International levels
- Strengthen the placement, guidance, counseling and extension service cells
- Up gradation of Computer facilities out of Bioinformatics-sub centre grant.
- To increase the number and titles of books in departmental library
- Purchase of interactive white boards for each classroom and seminar rooms
- Appointment of regular Qualified and Research Oriented Faculty
- To strengthen research activities, new research projects will be submitted to various funding agencies
- Faculty participation in Seminars, Conferences and visits will be encouraged
- Collaborative research activities at Global level will be promoted.

Name \_\_\_\_\_

Name \_\_\_\_\_

\_\_\_\_\_  
*Signature of the Coordinator, IQAC*\_\_\_\_\_  
*Signature of the Chairperson, IQAC*