

Annual Quality Assurance Report
(AQAR- 2016-17)

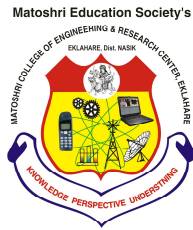
of the IQAC

(Track ID- MHCOGN23604)

Submitted to

National Assessment and Accreditation Council

by



Matoshri Education Society's

Matoshri College of Engineering & Research Centre

Eklahare, Near Odhagaon, Off Aurangabad Highway,

Nashik – 422105

The Annual Quality Assurance Report (AQAR) 2016-17 of the IQAC

Part – A

1. Details of the Institution

1.1 Name of the Institution : Matoshri College of Engineering and Research Centre, Eklahare,
Nashik

1.2 Address Line: Eklahare, Near Odhagaon Aurangabad Highway, Dist. Nashik (MS) 422105

Institution e-mail address : gkkharate@rediffmail.com, matoshri.hr@gmail.com

Contact Nos. 0253-2406600/01/02/03/11/12, 9552574750/51 ,

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Name of the Head of the Institution: Dr. Gajanan.. K. Kharate

Tel. No. with STD Code: 0253-2406611

Mobile: 96047882820, 9422726280

Name of the IQAC Co-ordinator: Prof(Dr) Mrs. V. H. Patil

Mobile: 9881024325

IQAC e-mail address: iqac.mcoerc.org@gmail.com

1.3 NAAC Track ID MHCOGN23604

1.4 Website address: www.mcoerc.org

Web-link of the AQAR: www.mcoerc.org/aqar2016-17.pdf

1.5 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	B	2.41	2016	2021

1.6 Date of Establishment of IQAC : 20th Jan 2016

1.7 AQAR for the year 2016-17

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)

Not applicable

1.9 Institutional Status: Affiliated College

Type of Institution : Co-education and Rural

Financial Status : Totally Self-financing

1.10 Type of Faculty/Programme: Engineering

1.11 Name of the Affiliating University: Savitribai Phule Pune University, Pune

1.12 Special status conferred by Central/ State Government-- Nil

2. IQAC Composition and Activities

2.1 No. of Teachers	09
2.2 No. of Administrative/Technical staff	03
2.3 No. of students	07
2.4 No. of Management representatives	02
2.5 No. of Alumni	02
2.6 No. of any other stakeholder and community representatives	01
2.7 No. of Employers/ Industrialists	01
2.8 No. of other External Experts	01
2.9 Total No. of members	31
2.10 No. of IQAC meetings held	04
2.11 No. of meetings with various stakeholders:	
Faculty	04
Non-Teaching Staff	02
Students	02
Alumni	01
2.12 Has IQAC received any funding from UGC during the year?	No

2.13 Seminars and Conferences

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

Seminar+workshops = 50

(ii) Themes: Technical /Social/ Skills Development

2.14 Significant Activities and contributions made by IQAC

Quality is a continuous phenomenon. We always strive to achieve better qualitative status by refining and improving the practices. At times new processes are defined unanimously as a policy decision.

- With the aid of comprehensive feedbacks IQAC proposed and recommended the practices to reinforce faculty and learners
- In consultation with the authorities the action plan to rectify the practices was prepared and implemented
- Future strategy has been finalized to increase the competitiveness

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 *

It has been decided in the meetings that the comprehensive feedbacks are to be collected from the various stakeholders. Based on the feedbacks the consequent analyses at different levels for accurate perception of the status and outcomes related to various constituents of the administrative and academic systems are to be analysed. The decided plans and corresponding achievements are tabulated below,

Plan of Action	Achievements
Improvements in Support Services : Canteen, Transport	Canteen cleanliness and hygiene have been continuously monitored. Bus drivers were tested and trained. Separate counseling was provided to all bus drivers. Number of buses are increased.
Improvements in Sports facilities	Green gym development has been proposed and sanctioned. Two courts for volleyball and a court for basketball have been improved.
Improvement in Library	Digital media have been added. Reading room capacity has been increased. National Digital Library membership has been registered.
Improvement in Waste management	The solid waste has been recycled to yield compost. The waste water has been recycled for plantations.
Support for research activities	Incubation center has been established to promote research through projects at UG and PG. PET coaching is provided in house and research supportive expert talks have been arranged.
Safety and disaster management	Fire extinguishers are procured and deployed.
Development of special skills	Student training for soft skills in view of increasing the employability has been scheduled regularly.

Administrative staff development	Office software training has been arranged for the office staff.
Faculty development and improvement	NPTEL courses were offered to the faculties and 60 per cent faculty secured significant score. Expert talks were arranged for the faculty for the improvements.

2.15 Whether the AQAR was placed in statutory body Yes

The furnished copy of AQAR has been presented and thoroughly reviewed by the members of LMC in a meeting. The LMC has unanimously approved AQAR. However based on the the suggestions and recommendations the significant scope for impovement was finalized.

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	02	00	02	00
PG	05	00	05	00
UG	06	00	06	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
Total	13	00	13	00

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

(ii) Pattern of programmes: Bi Semester

1.3 Feedback from stakeholders: Alumni, Parents, Employers, Students

Mode of feedback : Online and Manual

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

The syllabi are updated at the affiliated university periodically by BOS. Our institute has representations in BOS who actively contributed to undergo the whole process of syllabus revision. The faculty provided the inputs directly or indirectly, reflected in the revision.

The salient features include,

- Elements towards employability
- Knowledge enrichment
- Technology update
- Social and ethical values
- Teamwork and Leadership qualities

Criterion – II

2. Teaching, Learning and Evaluation

Total	Asst. Professors	Associate Professors	Professors	Others
175	159	12	04	01

2.1 Total No. of permanent faculty 170

2.2 No. of permanent faculty with Ph.D = 06

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
159	00	12	26	4	17			176	0

2.4 No. of Guest and Visiting faculty and Temporary faculty =05

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	03	17	00
Presented papers	23	04	03
Resource Persons	02	03	12

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

As there is always a room for improvement, we constantly retrospect and introspect accordingly. Multimedia enhanced learning shows the results. NPTEL courses are being undertaken by the faculty, results in the qualitative improvement in imparting the contents to the learners.

2.7 Total No. of actual teaching days during this academic year 90

2.8 Examination/ Evaluation Reforms initiated by 01
the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development

as member of Board of Study 02

Faculty 01

Curriculum Development workshop 05

2.10 Average percentage of attendance of students 80%

2.11 Course/Programme wise distribution of pass percentage :

FOURTH YEAR

SR.NO.	TITLE FO PROGRAMME	TOTAL NO.OF STUDENTS APPEAR	DISTINCTION %	FIRST %	HIGHER SECOND %	SECOND %	PASS %
1	COMPUTER	83	53	23	1	0	0
2	E&TC	97	45	45	1	0	0
3	INFORMATION TECHNOLOGY	37	9	24	3	0	0
4	MECHANICAL ENGINEERING	197	71	75	4	0	0
5	CIVIL ENGINEERING	118	18	85	17	1	0
6	ELECTRICAL ENGINEERING	69	27	23	3	0	0
TOTAL		601	223	275	29	1	0
%		601	37.1	45.8	4.8	0.17	0

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes :

The implemented processes are closely monitored at various levels by collecting and analysing the feedbacks. The results of the tests, online examinations, insemester examinations, theory examinations and practical/oral examinations are analyzed using various parameters. The performance of the students and faculty are evaluated qualitatively and quantitatively. Teaching feedbacks help a lot in all sort of improvements. Periodic appraisals are conducted for the faculties. If needed special counseling is provided for the identified learners.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefited</i>
Orientation programmes	23
Staff training conducted by the university	145
Staff training conducted by other institutions	34
Summer / Winter schools, Workshops, etc.	11

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	30	0	0	0
Technical Staff	15	0	0	0

Criterion – III

3. Research, Consultancy and Extension

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

We always try to introduce new ideas and practices in view of the all round development of the learners. During academic year 2016-2017 we have established Incubation Center at our Institute with the prime objective of promoting the research activities and implementation of innovative ideas.

Around 24 UG+PG projects were shortlisted after the thorough scrutiny by the expert panel and the process of patent filing and copyright registration has been initiated by these identified learners.

The learners and Faculty are furnishing the research proposals based on the innovative ideas. Many of the faculties have secured financial assistance from the affiliated university and other funding agencies for materializing their ideas.

3.2 Details regarding major projects NIL

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	02	01	00	00
Outlay in Rs. Lakhs	2.45 Lac	2 Lac	00	00

3.4 Details on research publications

	International	National	Others
Peer Review Journals	18	15	--
Non-Peer Review Journals	-	-	--
e-Journals	-	-	--
Conference proceedings	10	03	--

3.5 Details on Impact factor of publications:

No of Publications = 94 h-index cumulative till date= 40

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
Projects sponsored by the University	2	BCUD	4.45 Lac	4.45 Lac
Seminar, equipment and conference	02	SPPU	4.10 Lac	1.10 Lac
Total	04		8.55 lac	5.55 Lac

3.7 No. of books published: Nil

3.8 No. of University Departments receiving funds from NA

3.9 For colleges Nil

3.10 Revenue generated through consultancy: Nil

3.11 No. of conferences organized by the Institution Nil

3.12 No. of faculty served as experts, chairpersons or resource persons 10

3.13 No. of collaborations National 06

3.14 No. of linkages created during this year 04

3.15 Total budget for research for current year in lakhs : 10 lacs

3.16 No. of patents received this year : Nil

3.17 No. of research awards/ recognitions received by faculty and research fellows Nil

3.18 No. of faculty from the Institution who are Ph. D. Guides = 02, students registered 23

3.19 No. of Ph.D. awarded by faculty from the Institution 02

3.20 No. of Research scholars receiving the Fellowships - Nil

3.21 No. of students Participated in NSS events: University level 30

3.22 No. of students participated in NCC events: Nil

3.23 No. of Awards won in NSS: Nil

3.24 No. of Awards won in NCC: Nil

3.25 No. of Extension activities organized College forum 33 NSS 13

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

Efforts are made to realise institutional social responsibility by sensitising students and faculty on ISR and outreach programmes and their impact. With the motive of social responsibilities, the College ensures the transmission of values, attitudes and beliefs that will encourage students to be sensitive to social issues and become responsible citizens. It encourages students to reach out to the community through Social Awareness Programmes/Service Learning and experiential learning. The college has taken up the following activities towards ISR:

- The institute has conducted gender sensitisation and women empowerment programmes.
- The Institute has conducted environmental programmes to sensitize school students and public
- The curriculam of affiliated university has also a componant related to ISR.

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	7.5	00		7.5 Acre
Class rooms	31	00		31
Laboratories	66	00		66
Seminar Halls	06	00		06
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	00	00		00
Value of the equipment purchased during the year (Rs. in Lakhs)	00	00		00
Others	00	00		00

4.2 Computerization of administration and library

All the administrative staff are using the relevant software/tool for their work.

Dedicated networked office with high speed Internet is available for facilitation of tasks. The library is also equipped with modern computers and relevant software. OPAC and QR coding are also available. Digital library is maintained and the digital repository has ample resources for learners.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	7841	47 Lac	400	1.98 Lac	8241	49.89 Lac
Reference Books	4214	-	39	-	4253	-
e-Books	565	-	-	-	565	1.44 Lac
Journals	74	1.4 Lac	-	-	74	-
e-Journals	52303	-	-	-	52303	-
Digital Database	-	-	-	-	-	-
CD & Video	284	-	-	-	284	-
Others (specify)	-	-	-	-	-	-

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Computer Centres	Office	Departments	Others
Existing	760	20	32 MBPS	01	04	06	01
Added	--	--	--	--	--	--	--
Total	760	20	32 MBPS	01	04	06	01

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

We use in house e-Governance system for staff and students. The users are trained enough to be well acquainted for the use. Live networking demonstrations help the learners to understand the networking functionalities.

4.6 Amount spent on maintenance in lakhs :

i) ICT	92.65
ii) Campus Infrastructure and facilities	0.75
iii) Equipments	6.21
iv) Others	
Total :	99.51

Criterion – V**5. Student Support and Progression****5.1 Contribution of IQAC in enhancing awareness about Student Support Services**

Wide publicity has been given by IQAC to attract students' attention toward the existence and functionality of Student Support Services.

5.2 Efforts made by the institution for tracking the progression

The departmental coordinators in tandem with the Alumni association keep track of the students' progression and the update has been analysed.

(b) No. of students outside the state 02

(c) No. of international students 0

UG Students:

Last Year (2015-16)						This Year(2016-17)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
605	195	69	1430	00	2299	532	122	53	1251	00	1958

PG Students:

Last Year (2015-16)						This Year(2016-17)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
139	13	01	50	00	203	91	11	02	32	00	137

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

The students are provided with the expertise guidance as and when demanded/required for competitive examinations . In house and outside expert sessions are arranged for the students regularly helping them to choose their career paths. **No. of students benefitted = 425**

The Placement Cell of Matoshri College of Engineering & Research Centre has been training students for preparing themselves for different competitive examinations like MPSC, UPSC etc. It also gives special guidance to pursue higher studies. Faculty also gives guidance on the available material /books/websites in the library, market etc.

Lectures and seminars of experts, toppers from competitive examination have been regularly organized by college. College library has different books on competitive examination and latest magazine, which helps students for preparation. Whatsapp group of the students preparing for competitive examination helps students for getting update about competitive examination. More than 25 students and 6 staff from Mechanical department are qualified for AMVI (RTO) Mains Examination.

5.5 No. of students qualified in these examinations

GATE: 08 (Appeared-145)

CAT: 02

IAS/IPS/State PSC / UPSC :

STATE PSC-31 (AMVI-RTO)

5.6 Details of student counselling and career guidance

In house and outside expert sessions are arranged for the students regularly helping them to choose their career paths. **No. of students benefitted = 60%**

Students from all disciplines undergo career counseling by in-house faculties & a professional counselor throughout the year. The placement cell conducts various activities and workshops such as resume writing, interview skills, group discussions, aptitude tests and mock interviews for the students.

The College organizes several industrial visits to Industries, Research laboratories, higher learning institutions etc. College identifies appropriate industry that would help their formal learning. The College makes all sufficient arrangements to make field visits a wholesome learning experience. Faculty coordinators accompany the students and guide them effectively.

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	
34	370	131	08	

5.8 Details of gender sensitization programmes

As there is no such issue regarding gender discrimination we seldom require such programmes to be conducted.

5.9 Students Activities**5.9.1 No. of students participated in Sports, Games and other events****Sports:**

State/ University level 00 National level 00 International level 00

No. of students participated in cultural events

State/ University level 00 National level 00 International level 00

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

NIL

5.10 Scholarships and Financial Support

	Number of students	Amount in Lac
Financial support from institution	273	98.69
Financial support from government(TFWS)	46	3.66
Financial from Govt for SC/ST/NT/OBC students	--	--

5.11 Student organised / initiatives

Fairs : State/ University level 06 National level 0 International level 0

Exhibition: State/ University level 06 National level 0 International level 0

5.12 No. of social initiatives undertaken by the students 10

5.13 Major grievances of students (if any) redressed: None in particular

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision of Institute-

“To Establish Omnipotent Learning Centre, Meeting the Standards to Evolve as a Light House to the Society”

Mission of Institute-

- Setting up state-of-the-art infrastructure
- Instilling strong ethical practices and values
- Empowering through quality technical education
- Tuning the faculty to modern technology and strong liaising with industry
- Establishing the institute as prominent center for research and development
- Establish institute to serve as a Light House for the 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

The faculty is contributing for Quality Improvement directly or indirectly. Many of the faculties are involved in Conduction/attending FDPs for the implementation of syllabi at university level. Few of the faculties are members of the bodies and participate/lead actively in curricular activities.

6.3.2 Teaching and Learning

In continuation with our policies and practices we always try to enhance the teaching learning process. We organize/attend various content enrichment programmes contributing to the learning. Staff has to appear for NPTEL course and many of the staff have secured higher ranks in various subjects.

6.3.3 Examination and Evaluation

All the eligible faculties are involved in the examination and assessment processes. The staff carry out the tasks with integrity and honesty.

6.3.4 Research and Development

Institute has recently established the Incubation center to promote research activities. The aspirant teachers for Ph.D. are guided inhouse by the experinced faculty. The staff has been promoted for career advancement and specialised skill development.

6.3.5 Library, ICT and physical infrastructure / instrumentation

New resources have been added to the library, ICT and laboratories.

6.3.6 Human Resource Management

Existing human resources have been trained/upgraded regularly and identified resources are procured when needed.

6.3.7 Faculty and Staff recruitment

By understanding the requirement of the staff/faculty, new recruitments were carried out.

6.3.8 Industry Interaction / Collaboration

Existing MoUs were strengthened and new MoUs were signed with various organizations.

6.3.9 Admission of Students:

Little increase in the quality of input has been observed recently.

6.4 Welfare schemes for

Welfare scheme for needy students and teachers in the form for support as fees installments, fee concessions, donations and help exits.

6.5 Total corpus fund generated

Identified fund is kept for the basic expenditures needed for the administration and survival of the organization.

6.6 Whether annual financial audit has been done

Yes

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	___	Yes	AAC
Administrative	No	___	Yes	LMC & GC

6.8 Does the University College declares results within 30 days?

University results for both UG and PG are declared within 30 to 45 days.

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

University has recently launched automated paper setting system resulting in unambiguos paper setting and reduction in delays. All the examination related documentations are processed digitally.

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

University provides assistance to undergo autonomy process. Institute is planning to apply for autonomy in year 2019.

6.11 Activities and support from the Alumni Association

Alumni of the Institute are very active and guide the students actively for caareer path and providing information related to industry scenario and technologies. The Assosiation has established strong bond with alumni helping the students effectively.

6.12 Activities and support from the Parent – Teacher Association

Parent teacher meetings were scheduled by each department and the active participation has helped us in reinforcement of the policies and strategies.

6.13 Development programmes for support staff

The support staff are regularly trained in house with the tools and software related to their work.

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

The plantation, recycling, waste management, green jounals, digital repository and starred electrical appliances help to keep 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.

Sticking to the policies and plans well aligned with the Vision and Mission of the institute, we always strive for the qualitative enhancement. We always try to introduce new ideas and practices in view of the all round development of the learners. During academic year 2016-2017 we have established Incubation Center at our Institute with the prime objective of promoting the research activities and implementation of innovative ideas.

Around 24 UG+PG projects were shortlisted after the thorough scrutiny by the expert panel and the process of patent filing and copyright registration has been initiated by these identified learners.

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

The review and retrospection have been carried out regarding the plan of action confined to the previous year. The plan included improvement of the project quality, improvement in the results, enhancement in the aptitude of the students, imbibing the research element in the selected dissertation work and skill development for employability.

For the fruition of the decided plans the team at the institute is delivering the maximum for the over all benefit. The actions based on the evaluation of the outcomes over previous years span are,

- The evaluation of the projects at the UG and PG level reveal the striking improvement related to the inclusion of research element in the work
- The steady rise in the students' interest confined to copyrights and patent filing
- Presentation and exhibition skills of the students show drastic improvement
- The result improvement yet has to reach the level of satisfaction

Based on these outcomes the Dean Academic, Heads of the department and Principal have furnished the gist for marching ahead positively.

7.3 Give two Best Practices of the institution

By focusing at the qualitative development the Institute has initiated the significant activities for the students and the faculty. The noteworthy practices include,

- The departments have converged their efforts to acquaint the students to include the research element in their projects. Proper research methodology has been followed helping the projects to be the part of the Incubation center of the Institute. Many of the students have published at significant platforms and showcased their work and talent.
- For the impact teaching the faculty undergoes NPTEL training and the faculty succeeded in the respective examination they have appeared for, This activity has brought significant rise in the understanding of the faculty helping the students eventually.

7.4 Contribution to environmental awareness / protection

To be Environment conscious is one of the prioritised objectives of the institute. In view of that the institute is constantly initiating the plantation drives with a close watch on the maintenance

of the planted trees/shrubs. The ever enthusiastic NSS unit at our Institute actively participate in Plantation, Campus Cleaning, Waste Management, river cleaning etc.

7.5 Whether environmental audit was conducted? Yes

7.6 Any other relevant information the institution wishes to add.

There is no significant change in the policies and plans related to self analyses, evaluation and appraisal.

8. Plans of institution for next year

- Prepare the eligible programmes for N.B.A. and/or
- Upgrade to higher grades in NAAC.

Dr. V. H. Patil

Vice Principal,

Coordinator, IQAC

Dr. G. K. Kharate

Principal,

Chairperson, IQAC