ANNUAL QUALITY ASSURANCE REPORT (AQAR) 2016-17

Submitted to

National Assessment and Accreditation Council

(NAAC)

By

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE

Congress Nagar, Nagpur-440012(M.S.)

Affiliated to

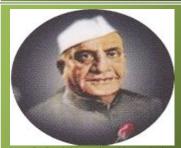
Rastrasant Tukadoji Maharaj Nagpur University, Nagpur

AQAR 2016-17

Recognized as a Centre for Higher Learning and Research Re-assessed as 'A+' Grade with CGPA 3.51 by NAAC A College with Potential for Excellence

Institutional Member of Asia Pacific Quality Network (APON)





Late Dr Panjabrao alias Bhausaheb Deshmukh Founder President



SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE

Congress Nagar, Nagpur-440012(M.S.)

The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

1. Details of the Institution		
1.1 Name of the Institution	Shri Shivaji Education Society Amravati's, Science College, Congress Nagar, Nagpur.	
1.2 Address Line 1	Humpy Yard Road, Congress Nagar, Nagpur	
Address Line 2	Humpy Yard Road, Congress Nagar, Nagpur	
City/Town	Nagpur	
State	Maharashtra	
Pin Code	440012	
Institution e-mail address	shivajiscience_ngp@yahoo.com	
Contact Nos.	0712-2423432	
Name of the Head of the Institution:	Dr. D. K. Burghate, Principal	
Tel. No. with STD Code:	0712-2440955	
Mobile:	9422306680	
Name of the IQAC Co-ordinator:	Dr. G. R. Avachar	
Mobile:	9421845390	
IQAC e-mail address:	g.avchar@rediffmail.com	
1.3 NAAC Track ID (For ex. MHCOGN .	18879) MICOXX1010167	
1.4 NAAC Executive Committee No. & I (For Example EC/32/A&A/143 dated This EC no. is available in the right co of your institution's Accreditation Cer	3-5-2004. orner- bottom EC(SC)/25/A&A/3.3 dated June 09,2017	
1.5 Website address:	www.http://sscnagpur.edu.im	
Web-link of the AOAR:	www.http://ssenagnur.edu.in/AOAR 2015-16.doc	

1.6 Accreditation Details

Cl. No.	Cyrolo	Crada	CCDA	Year of	Validity
Sl. No.	Cycle	Grade CGPA		Accreditation	Period
1	1 st Cycle	Five Star	-	2002	Five Years
2	2 nd Cycle	A	3.19	2010	Five Years
3	3 rd Cycle	A^{+}	3.51	2017	Seven Years

1.7 Date of Establishme	nt of IQAC: I	DD/MM/Y	YYY	15/07/2004		
1.8 AQAR for the year (for example 2	2010-11)		2016-17		
1.9 Details of the previo Accreditation by NAAC	•					
i. AQAR 2012-13 submi ii. AQAR 2013-14 subm iii. AQAR 2014-15 subm iv. AQAR 2015-16 subm 1.10 Institutional Status	itted to NAAC iitted to NAAC	C on 20/10/. C on 03/11.	2014 /2015			
University		State	Cent	ral De	eemed	Private
Affiliated College		Yes v	No			
Constituent College		Yes	No	V		
Autonomous college	e of UGC	Yes	No	V		
Regulatory Agency	approved Inst	itution	Yes	v No		
(eg. AICTE, BCI, MC	CI, PCI, NCI)					
Type of Institution	Co-education	on v	Men	Won	nen	
	Urban	٧	Rura	l Trib	al	
Financial Status	Grant-in-aid	l	UGC 2	e(f) V	UGC 12B	V
	Grant-in-aid	d + Self Fii	nancing	√ Totall	ly Self-financi	ng 🔲

1.11 Type of Faculty/Programme	
Arts Science V Commerc	e Law PEI (Phys Edu)
TEI (Edu) Engineering Hea	alth Science Management
Others (Specify) BCA, MCA	
1.12 Name of the Affiliating University (for the Co	plleges)
Rashtrasant Tukadoji Maharaj, Na	gpur University, Nagpur
1.13 Special status conferred by Central/ State Gov	vernment UGC/CSIR/DST/DBT/ICMR etc
Autonomy by State/Central Govt. / University	
University with Potential for Excellence	UGC-CPE
DST Star Scheme	UGC-CE _
UGC-Special Assistance Programme	DST-FIST
UGC-Innovative PG programmes	Any other (Specify)
UGC-COP Programmes	V
2. IQAC Composition and Activit	<u>ies</u>
2.1 No. of Teachers	11
2.2 No. of Administrative/Technical staff	02
2.3 No. of students	01
2.4 No. of Management representatives	01
2.5 No. of Alumni	01
2. 6 No. of any other stakeholder and	02
Community representatives	<u> </u>
2.7 No. of Employers/ Industrialists	01
2.8 No. of other External Experts	02
2.9 Total No. of members	21
2.10 No. of IQAC meetings held	05

2.11 No. of meetings with various stakeholders: No. 05 Faculty 02
Non-Teaching Staff 02 Alumni 01 Others -
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 1 State - Institution Level -
(ii) Themes National Seminar on Teaching Learning and Evaluations
2.14 Significant Activities and contributions made by IQAC
 Monitoring the performance of the teaching-learning activities and promotions through Career Advancement Scheme of UGC National Seminar on Teaching Learning and Evaluations Academic Audit of Faculty Online Feedback system AISHE database prepared Adopted a village at Village Yerla, Gohani to implement extension activities under N.S.S. Awareness among students about environmental issues. Evaluation of the performance of the faculty by way of PBAS. Participation in national & international conferences, seminars and workshops as well as symposium Encouraged to publish research papers in international database journals. Workshop on Communicative Skills Guest lecture and workshop on Edible Mushroom Cultivation Blood Donation camp Strengthening the campus placements process to provide job opportunities for the students Celebration of Independance day, International Yoga Day, Nutrition day, Forest conservation day, Hindi Diwas etc.

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 *

To Reconstitute of IQAC committee as per requirement The IQAC is reconstituted which includes Teachers, Administrative Staff, Technical staff, Stakeholder, Management Representatives, External Experts, Alum Student Representatives etc. Preparation and electronic submission of AQAR 2015-16 To encourage all departments to conduct Conference / Seminars / Workshops/Guest Lecture of Eminent Personalities NAAC sponsored National Seminar on Teaching Lear and Evaluations held on 20-21, January 2017 State Level Science Fair 2017 – 'Shodh' held on Feb 29,2017 Dept of Physics organized a Guest Lecture by Dr Adgaokar, Former Head, Dept. of Physics, Sh Science College, Amravati on 13/9/2017 on 'Coclimplant –A' and by Dr Bhosale, Shivaji Univer Kolhapur on 14 th Dec 2017 on 'Solar Energy'. Department of Chemistry organized Orient Programme for M. Sc. Students on Feb 10, 2017 Department of Biotechnology organized a Worksho Biofertilizers and Biopesticides –Production and Quaresting during October 7-8, 2016 Department of Botany organized Guest Lecture workshop on Edible Mushroom Cultivation on 7 th		Plan of Action Achievement	Sr. No	Ī
submission of AQAR 2015-16 To encourage all departments to conduct Conference / Seminars / Workshops/Guest Lecture of Eminent Personalities Bersonalities NAAC sponsored National Seminar on Teaching Lear and Evaluations held on 20-21, January 2017 State Level Science Fair 2017 – 'Shodh' held on Feb 29,2017 Dept of Physics organized a Guest Lecture by Dr Adgaokar, Former Head, Dept. of Physics, Sh Science College, Amravati on 13/9/2017 on 'Coclimplant –A' and by Dr Bhosale, Shivaji University Kolhapur on 14 th Dec 2017 on 'Solar Energy'. Department of Chemistry organized Orient Programme for M. Sc. Students on Feb 10, 2017 Department of Biotechnology organized a Workshop Biofertilizers and Biopesticides –Production and Quartesting during October 7-8, 2016 Department of Botany organized Guest Lecture workshop on Edible Mushroom Cultivation on 7 th		To Reconstitute of IQAC committee as per Administrate requirement Management		
departments to conduct Conference / Seminars / Workshops/Guest Lecture of Eminent Personalities Dept of Physics organized a Guest Lecture by Dr Adgaokar, Former Head, Dept. of Physics, Sh Science College, Amravati on 13/9/2017 on 'Coc Implant -A' and by Dr Bhosale, Shivaji Unive Kolhapur on 14 th Dec 2017 on 'Solar Energy'. Department of Chemistry organized Orient Programme for M. Sc. Students on Feb 10, 2017 Department of Biotechnology organized a Worksho Biofertilizers and Biopesticides -Production and Qu Testing during October 7-8, 2016 Department of Botany organized Guest Lecture workshop on Edible Mushroom Cultivation on 7 th	bmitted	submission of on 24/11/2	2	
2016 and organized a Workshop on 'Floriculture Landscaping' Department of Mathematics organized a Guest Lectur Relativity delivered by Dr Saraykar, Professor and Head of Department of Mathematics, R T M Naturivesity, Nagpur Department of Microbiology organized a Semina 'Research Skills and Thesis Writing' on 24th Sept. and Workshop on 'Techniques in Molecular Biology 2nd Sept. 2016 Environment Cell organized a Workshop on 'Roo Organic Farming with New Type of Irrigation Sys Biofertilizers and Biopesticides —Production and Qu Testing during October 7-8, 2016 Department of Botany organized Intercolle Competition on 'Forest Conservation Day' Language Department organized Short Term Cours Foreign Language in collaborations with Lingu Department, RTM Nagpur University, Nagpur Department of Language organized a Workshop 'Personality Development and Communicative Skills Teachers participated in the Workshop on 'Perform Based Assessment in Science' held on 24-26, Dec. 20 Internal Complaint Committee (ICC) organized a Sen on 'Women Rights'	Feb 28- Dr C S Shivaji Cochlear niversity entation Shop on Quality are and 7th Oct. ure and cture on and Ex Nagpur inar on bt. 2016 ogy' on Rooftop System' Quality ollegiate ourse in nguistic hop on ills' ormance 2016	To encourage all departments to conduct Conference / Seminars / Workshops/Guest Lecture of Eminent Personalities Department Personalities Personalities	3	

4	To encourage faculty members and students to participate various conferences and seminars	Faculty members and students participated in various international, national and state-level conferences/ seminars/ workshops
5	To encourage students to participate in college, university and national level sports	 Ms. Harshada H Shirke participated in International Soft Ball Championship held at China during 21st -25th October 2016 and college contributed Rs. 50,000/- for her participation. NCC cadet Ms. Srushti Pravin Patre participated in all India Nau Sainik Camp held at Karwar in the state of Karnataka during 7-17 October, 2016. Her Participation in National Nau Sainik Camp made Maharashtra Directorate the Champion Directorate after 14 years Students actively participated in college, university and national level. 6 Cadets participated in TSC Camp, Kolhapur 23 Cadets went for CATC Camp held at Nagpur 21 Cadets cleared B cert exam and 10 Cadets cleared C cert exams Cadet Nikita Kumbhalkar participated in Marathon race held at Nagpur
6	To Conduct Academic Audit	Academic Audit conducted by IQAC.
7	To arrange Parent Teacher Meet	The Parent - Teacher Meet was arranged and a feedback was taken.
8	To celebrate Birth Anniversary of Founder President Late Dr Panjabrao alias Bhausaheb Deshmukh	The Birth Anniversary of Founder President Late Dr Panjabrao alias Bhausaheb Deshmukh was celebrated on 27/12/2016. Various competitions, cultural functions, Games and sports events, Blood Donation Camp were organized during the celebration.
9	To take feedback from students	Feedback collected from students at the end of session.

^{* (}Note: Academic Calendar for the Academic Year 2016-2017 is attached- Annexure: I)

2.15 Whether the AQA	R was p	laced in statuto	ory body	Yes	٧	No	
Management	٧	Syndicate		Any othe	r body	у	
Provide the detail	s of the	action taken					
The statutory be taken the note of				nittee) disc	ussed	and has	

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	07	00	07	-
PG	05+1(MCA)	-	6	-
UG	02 [1-B.Sc.	-	1	-
	+1-BCA]			
PG Diploma	1	-	1	-
Advanced Diploma	-	-	-	-
Diploma	2		2	-
Certificate	9	-	6	3
Others		-	-	-
Total	26	00	23	03
Interdisciplinary	2	-	-	-

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

All PG programmes have CBCS system

(ii) Pattern of programmes:

Innovative

Pattern	Number of programmes
Semester	08
Trimester	-
Annual	-

1.3 Feedback from stakeholders* Alumni V Parents V Employers (<i>On all aspects</i>)	- Student	s v
Mode of feedback : Online \lor Manual \lor Co-operating s	schools (for PE	i) [-
(Note: Feedback Analysis Report for the Academic Year 2016-17 attached as Ann	nexure-II)	
1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention the	neir salient aspe	cts.
Nil 1.5 Any new Department/Centre introduced during the year. If yes, give details.	Nil	

Criterion - II

2. Teaching, Learning and Evaluation

2.1 Total No. of
permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
35	14	21	-	-

2.2 No. of permanent faculty with Ph.D.

32

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

Asst.		Associ	ate	Profes	ssors	Other	S	Total	
Profes	ssors	Profess	sors						
R	V	R	V	R	V	R	V	R	V
14	17	22	Nil	-	3	-	-	36	20

2.4 No. of Guest and Visiting faculty and Temporary faculty

12 4	55
------	----

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	24	15	-
Presented papers	24	15	-
Resource Persons	-	-	-

- 2.6 Innovative processes adopted by the institution in Teaching and Learning:
 - Bridge courses in the beginning of the session.
 - Students Seminars are organized by various departments.
 - Teacher Mentor scheme for students
 - Study materials are shared with students.
 - Teaching faculty and students are encouraged to use latest technology such as LCD, internet, smart board etc., in the teaching learning process
 - Remedial Classes for weaker students.

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

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

Unit Test, Assignments, Assessment by Internal Examination, Seminars, Tutorials, Group Discussions, Group Assignments, Projects, Debates, Surprise Test, Quiz Competition on Syllabi, Open Book Examination etc.

2.9	No. of faculty members involved in curriculum Restructuring /revision/syllabus development
	as member of

Board of Study 4 Faculty - Curriculum Development workshop -

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students	Division					
	appeared	Distinction	I	II	III	Pass %	
B.Sc. Final	241	60	120	30	31	80.87	
M.Sc. Micro	22	-	15	4	-	83.30	
M.Sc. Chemistry	22	-	1	-	-	80.95	
M.Sc. Comp Science	37	-	10	03	-	33.00	
M.Sc. Physics	22	-	3	-	-	42.85	
M.Sc. Mathematics	22	-	5	-	-	50	
MCA	09	-	09	-	-	100	

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

- Internal Academic Audit is conducted at the end of every semesters for the assessment of progress of Teaching & Learning processes
- Support is given to arrange Guest lectures / Conferences / Seminars/ Workshops / ISR for Teachers and Students in the College.
- Learning facilities are enhanced in the form of ICT support, Reference Books, Equipments etc.
- Result analysis is discussed in IQAC meetings, College Council's meeting and Local Management Committee's meeting
- Video lectures of few teachers are made viral on website of college
- Regular visit to the departments to monitor the functioning of the departments.
- Yearly Assessment of every teacher is conducted through Self Appraisal- Academic Performance Indicators. (API) for evaluation of Teaching activities, Extension Activities and Research.
- Parent-Teacher Meet are arranged to discuss the academic progress of the students
- Feedback from student on Teaching are collected, Analyzed and communicated to the respective teacher for improvement.

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	19
UGC – Faculty Improvement Programme	-
HRD programmes	02
Orientation programmes	09
Faculty exchange programme	-
Staff training conducted by the university	07
Staff training conducted by other institutions	03
Summer / Winter schools, Workshops, etc.	29
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	11	6	-	6
Technical Staff	40	12	-	9

Criterion – III

3. Research, Consultancy and Extension

- 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution
 - Research Committee for monitoring, promoting and to encourage the faculty for research in the concerning subject.
 - Workshop on research methodology
 - Established linkages with institution / organizations for training and R & D
 - Regular posting of upcoming seminars, conferences, etc. by the research committee
 - Facilitated for minor / major project proposals for research/ research work/ paper presentations/ publications in suitable Journals
 - Faculties are felicitated by awarding them cash prize for their paper publication in the Journals of repute.
 - Best researcher award is instituted by the college
 - Financial Assistance is given to attend the International Conference/ Symposium.
 - Provision of Seed-money of Rs 10, 00,000/- to promote research activities.
 - Incentives are given for publications of research papers

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	5	1	-	-
Outlay in Rs. Lakhs	1,40,81,954=00	23,00,000 =00	-	-

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	6	6	-	-
Outlay in Rs. Lakhs	25,89,000	5,25,000	-	-

3.4 Details on research publications

	International	National	Others
Peer Review Journals	12	15	-
Non-Peer Review Journals	-	-	-
e-Journals	-	-	-
Conference proceedings	24	3	-

3.5 Details on Impact factor of publications:								
Range	0.0702.5./	Average	2	h-index	1_/	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	3	BRNS	28,43,925	24,48,490
Minor Projects 02	2	UGC	13,62,000	-
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 N o	. of books published	i) With ISBN N	o	Chapte	ers in Edited I	Books 27
			ii) With	out ISBN N	0	
201	CII : D		ŕ			
3.8 No	. of University Depar	tments receiving f	funds from			
		UGC-SAP -	CAS	-	DST-FIS	Γ -
		DPE _	DBT	Scheme/fun	ds _	
3.9 Fo	colleges	Autonomy	CPE	v	DBT Star	Scheme _
]	NSPIRE $\sqrt{}$	CE		Any Othe	er (specify)
	evenue generated thro		54,360	/-		
	Level	International	National	State	University	College
	Number	-	-	1	-	1
	Sponsoring agencie	<u> </u>	_	NAAC	_	College
2 12 N		1			ns [4]	
3.12 IN	o. of faculty served a	s experts, chairper	rsons or res	ource person	IS _ ·	
3.13 N	o. of collaborations	23 Interna	ational 3	Nationa	1 8	Any other 12
3.14 N	o. of linkages created	during this year	-			
3.15 T	otal budget for resear	ch for current year	r in lakhs:			
Fro	m Funding agency	- Fro	om Manage	ment of Uni	versity/Colleg	ge 11, 00, 000=00
Total	11, 00, 000=00					

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	-
National	Granted	-
Total and a mal	Applied	-
International	Granted	-
Commercialised	Applied	-
Commerciansed	Granted	-

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

Ī	Total	International	National	State	University	Dist	College
	01	-	-	-	-	-	01

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them	
30 45	
3.19 No. of Ph.D. awarded by faculty from the Institution 03	
3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)	
JRF _ SRF _ Project Fellows _ Any other _	
3.21 No. of students Participated in NSS events:	
University level 100 State level - National level _	
International level _ College level _ 134	
3.22 No. of students participated in NCC events:	
University level 50 State level - National level - International level -	
3.23 No. of Awards won in NSS:	
University level - State level - National level - International level -	
3.24 No. of Awards won in NCC:	
University level - State level 12 National level - International level -	
3.25 No. of Extension activities organized	
University forum - College forum 9	
NCC 10 NSS 7 Any other -	

- 3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility
 - Intercollegiate competition on Forest conservation day
 - Guest lecture and workshop on Edible Mushroom Cultivation
 - Blood Donation camp
 - Organized street play "Beti Bachao-Beti Padhao"
 - Celebration of Independance day
 - Organized NSS camp at Village Yerla, Gohani
 - Oragnized Organ donation rally
 - Organized Aids awareness programme
 - Organized biodiversity conservation programme: installation of wooden nests and water pots for birds
 - Celebrated Helping Hand day on January 2, 2016
 - International Yoga Day Celebrated
 - Cleanliness awareness programme under Swaccha bharat Abhiyan
 - Organized workshop on Roof Top Farming
 - Organized cancer awareness programme
 - An awareness programme was organized for students about Traffic rules and discipline
 - Celebration of Nutrition day
 - Organized workshop on Polysistic Ovarian Syndrome for staff in colleboration with KRIMS Hospital
 - Organized Eco-friendly Rakhi as well as Eco-friendly Holi
 - Organized workshop on Honey-Bee: Apiculture
 - Organized old cloths donation camp
 - Ceremonial Parade on Republic day organized by NCC
 - Organized NCC Exam B and C cert

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	3 Acre	-	Management	3 Acre
Class rooms	22	5	Management	27
Laboratories	33	15	Management	48
Seminar Halls	02	-	Management	02
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	-	-	-	-
Value of the equipment purchased during the year (Rs. In Lakhs)	-	-	-	-
Others	-	-	-	-

4.2 Computerization of administration and library

- Libman web-software installed for effective management of library.
- Master software is used for office management including accounting, admission data, Identity Card, Library Card, Fee Collection, Scholarship, Transfer Certificate, Bonafied / Character / Attempt Certificate, etc.
- Office and Library are fully computerized.
- Main office is well equipped with computers, printers, photocopiers, fax etc.
- The campus is under surveillance of CCTV.
- Library is equipped with INFLIBNET system.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	36656	6449133	1483	574839	38139	7023972
Reference Books	2339	1781556	110	218328	2449	2000084
e-Books	35	46,520	12	20420	47	66940
Journals(Main	25	50,959	2	6000	27	56,959
Library)						
e-Journals	2	5000	-	-	2	5000
Digital Database	-	-	1	1,20,000	1	1,20,000
(Web-software)						
CD & Video	500	28,760	10	3,500	510	31,260
Others (specify)	-	-	3	1,05.000	3	1,05.000
Biometric						
Database						

4.4 Technology up gradation (overall)

	Total Computer s	Compute r Labs	Internet	Browsing Centres	Computer Centres	Office	Depar t- ments	Oth ers
Existing	350	3	To all computers	1	1	Fully computer ised	13	-
Added	-	-	-	-	-	-	-	1
Total	350	3	-	1	1	-	13	-

- 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)
 - Master software is used for office management including accounting, admission data, Identity Card, Library Card, Fee Collection, Scholarship, Transfer Certificate, Bonafied / Character / Attempt Certificate, etc.
 - Main office is well equipped with computers, internet, printers, photocopiers and fax.
 - The campus is under surveillance of CCTV.
 - The library is equipped with 35 computers along with Internet facility for faculty and students.
 - A library software LIBMAN is installed.
 - Book bank facility to economically weaker section of students.
 - Reprography facility to students.
 - The college provides the e-library facility, INFLIBNET to access e-resources and e-journals.
 - The computer department guides the other faculty members from time to time to use ICT resources in their respective classes, different workshops and seminars.
 - The Seminar Room and Conference Hall is well equipped with multimedia and are used frequently for conducting seminars and talks by experts.
 - Laptops given to all Departments.
 - Entire campus is Wi-Fi enabled.
 - Regular Training programme for Computer basics is offered by the Computer Department for Teachers, Non-teaching staff and students
 - Journals, Periodicals, magazines and other reading material are available for teachers and students.
 - Open access for teachers and PG students.
 - The catalogues of various publishers are made available for purchasing relevant books.
 - M-OPAC (Mobile Open Access Catalogue) facility is available.
 - SMS facility is provided to student for book issue/return.

4.6 Amount spent on maintenance in lakhs:

i) ICT 1,78,150/-

ii) Campus Infrastructure and facilities 1,43,58,134/-

iii) Equipments 19,06,793/-

iv) Others 4,78,657/-

Total: 1,69,21,734/

Criterion - V

5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
 - Suggestions are welcomed in respect to all areas including infrastructure, administration, teaching methodology.
 - The suggestion Box/ Complaint Box is kept in front of every Department and Hostel. The issues raised are addressed immediately.
 - Students Grievance Cell functions effectively by redressing student's grievances.
 - Scholarship is provided to deserving backward students and economically backward students.
 - Information is circulated through Notice Board, through SMS services, through letter correspondence, through circulars and website.
 - Special sessions are arranged to make the students aware of the various techniques involved in getting jobs. Mock tests, discussions and interviews are organized.
 - Through extension activities, students are made familiar with how they can come close to community
 - Financial support is given to various students at UG, PG and research students through scholarship sponsored by King Edward Memorial Society.
- 5.2 Efforts made by the institution for tracking the progression
 - Internal tests are conducted regularly to monitor and measure students' academic performance
 - Remedial coaching is conducted for students who have not cleared university exams.
 - Parent -Teacher meeting is conducted to keep the parents informed about their ward's performance.
 - The alumni association was strengthened
 - Progressions are regularly monitored on one to one basis.
 - Through Career and Guidance Cell, students are told about various career and job Opportunities,
 - Emphasis is laid on personality development of the students.
 - The Placement Cell regularly organized brief training programmes for students.
 - Student Mentor Scheme is functional.
 - Online Feedback mechanism from student.

5.3	(a) Total	Number	of students

G	PG	Ph. D.	Others
1517	283	17	-

(b) No. of students outside the state

96

(c) No. of international students

_

<u>UG</u> Male

No.	%
511	33.68
No	%

Female

No.	%
1006	66.31

PG Male

No.	%		
42	14.84		

Female

No.	%			
241	85.15			

Last Year					This Year						
General	SC	ST		Physically Challenged		General	SC	ST	OB C	Physically Challenge d	
653	245	27	678	-	1603	712	269	34	802	-	1817

Demand ratio 1:3

Dropout: 14 % (UG) and 8 % (PG).

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

- The college has centre for NET/SLET coaching in subject chemistry. For the other Competitive examinations like UPSC/MPSC, the facilities of coaching are available through Alumina Association
- Career Guidance and Placement Cell assists in providing inputs for getting better opportunities in career making.
- Career Guidance and Placement Cell conducts various classes and programmes in connection with competitive examinations.
- Workshop, seminar are organized on personality development, facing interviews, group discussions etc.

No. of students beneficiaries

81

5.5 No. of students qualified in these examinations

NET 1

	SET/SLET
--	----------

-

GATE

1

CAT

IAS/IPS etc

-

State PSC

-

UPSC

3 | 9

Others

5.	6	Details	of	student	counselling and	l career	guidance

- A separate Career Guidance and Placement Cell is established
- The Value Education classes provide a forum for discussion of issues.
- Guidance Counseling Cell provided help to students who approached them.
- Various personal, social and career issues were discussed with mentors.
- Seminars were organized by inviting professional organizations to provide career guidance.
- Pre-exam counseling was given to all students.
- Students who did not pass their university exams were given counseling.
- Guidance on higher education and job were given.

No. of students benefitted

28

5.7 Details of campus placement

	Off Campus		
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
1	60	06	Nil

5.8 Details of gender sensitization program	nmes	gramn	progra	sensitization	gender	of	Details	5.8	5
---------------------------------------------	------	-------	--------	---------------	--------	----	---------	-----	---

- Celebration of National Women's Day
- Gender sensitization programme is conducted regularly
- NSS and Nature Club organised Save Girl Child, Rally
- Stop Cancer Programme
- Organized one day workshop on women empowerment and awareness about sexual Harassment

5	Ω	Students	٨٥	4:.		
_	ч	Students	AC	יוד	VIT	es

5.750	ducitis 7 lett vittes							
5.9.1	No. of students participated	in Sports, C	ames and ot	her events	S			
	State/ University level 12	25 Nati	onal level	-	Internat	ional level	-	
	No. of students participated	l in cultural	events					
	State/ University level	- Nati	onal level	-	Internat	ional level	-	
5.9.2	No. of medals /awards won	by students	in Sports, G	ames and	other eve	ents		
	Sports: State/ University le	evel 3	Nationa	l level	-	Internationa	l level	-
	Cultural: State/ University le	evel _	Nationa	l level	-	Internationa	l level	-

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	8	45371/-
Financial support from government	929	3557355/-
Financial support from other sources	-	-
Number of students who received International/ National recognitions	-	-

5.11 Student organised / initiatives	
Fairs : State/ University level 1 National level - International level	-
Exhibition: State/ University level 1 National level - International level	-
5.12 No. of social initiatives undertaken by the students 28	
5.13 Major grievances of students (if any) redressed:Nil	

Criterion - VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision:

"To create human resources through quality, Societal, progressive and affordable education"

Mission

- To provide students with an environment for all round development of their intellectual, physical, aesthetic and social potentials.
- To discover and develop the academic and intellectual skills of the students.
- To encourage attitudes of integrity, hard work, honesty, fairness and tolerance in students so that they give their best to the society based on human values.
- To inculcate passion for excellence through information and communication technology, industrial exposures and scientific projects leading to elevated career profiles and national development.
- To stimulate the students to perform at the peak of their potentials.

6.2 Does the Institution has a management Information System

Yes

The Management Information System is used in the functioning of the college for administrative process including Finances, Salary structure for employees, I-card generation, Income tax report, Arrears details, Loan details, Student Admission, Student registration, Fee details, Students details, Admission Slip generation, Students List, Library Management System.

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

6.3.1 Curriculum Development

- The curriculum of the University is mandatory to all affiliating colleges.
- The institution encourages the faculty to organize the workshops in the college and attend the workshops organized by other colleges in various subjects on the syllabus framed by the university.
- The institution inspires the faculty to organize and attend national/international seminars/conferences.

6.3.2 Teaching and Learning

- Faculties are provided with all essential facilities for effective teaching.
- Teachers are encouraged to use audio-visual instruments like LCD projector, OHP, PPT, molecular models and charts.
- To improve the quality of teaching, management encourages the faculty to attend orientation courses, refresher courses, workshops and seminars.
- The teaching performance of faculty is evaluated through PBAS proforma.
- The faculties are suggested to use interactive method for better learning.
- The academic progress of the Students is evaluated through internal assessment system

6.3.3 Examination and Evaluation

The institution takes the following measures for internal and external evaluation processess:

Internal Assessment

The information about the tentative dates of time table of examinations such as unit tests, surprize tests, terminal/test examination, internal assessment is given in the prospectus, hand book, notices, academic calender and website.

- The principal discusses the norms of evaluation in the meeting of college council.
- A detailed time table for terminal/test examination and submission of assignment is put up on the notice board well in advance to help the students to plan and prepare effectively.
- The report of evaluation is made available to all stakeholders during the address by the principal and at the time of parent-teacher meet.

The Evaluation Reforms Initiated By College:

- The concerned department maintains the record of internal assignments.
- At the beginning of each semester, every teacher informs students about the scheme of marking for internal assessment.
- The college conducts surprize tests, terminal examination, viva-voce etc. for assessment and evaluation of the students.
- As per the direction of university, 10/15 marks are assigned for internal assessment for each paper of different subjects. The students are assessed on the basis of class test, attendance, project assignments, seminar, study tour, industrial visits, visit to educational institutions and research organizations, field work, group discussions or any other innovative practice / activity.

6.3.4 Research and Development

- Research Committee is established in the college to promote & monitor research culture, regularly posts information about forthcoming workshops, seminars and conferences.
- 30 faculty members are recognized by University as a Supervisor.
- 7 Departments are recognized as a place of Higher Learning and Research.
- 10 research scholars are registered for Ph.D. in various subjects.
- Ph.D. is awarded to 1 faculty member in the academic session 2015-16.
- 54 Research papers are published in Various National and International Journals.
- Major and Minor Research Projects are encouraged
- Chapters in Curriculum Books are contributed by 6 faculty members.
- Incentives are given to teachers for publication of their research work in peer reviewed Journals in the form of cash prize.
- Best Researcher award is instituted at institute level.

6.3.5 Library, ICT and physical infrastructure / instrumentation

- Staff and students have access to INFLIBNET (e-journal)
- Collection of reference and text books of various subjects, periodicals, magazines, digital resources, and audio visual collections. Most of the Departments have their own library to cater to immediate requirements.
- All the resources are catalogued and the functioning of the library is fully automated.
- The Departments are also equipped with computers, printers, internet connectivity, LCD projector, Wi-Fi and so on.
- The other facilities provided are TV, digital camera, Xerox Machine, Scanner etc.
- The College has consistently upgraded both the physical and learning infrastructure to meet the growing academic needs.
- Internet facility is made available to all students and faculty.
- Management Information System partially exists in the College library with LIBMAN software.

6.3.6 Human Resource Management

- The management is committed to the academic development of the college.
- The administration is fully decentralized and total functional freedom is given to the head of respective department.
- Various committees are constituted to monitor the Co-curricular and other activities.
- The faculties are the members of various committees and they perform their responsibilities with the cooperation of nonteaching Staff.
- Regular feedback is taken from the stakeholders and if needed the suggestions if any, is implemented.
- There are many welfare schemes for staff and students like free medical check-up, group insurance, awards at College and Society level and financial support.
- Institution has a tradition to celebrate National and social events collectively.

6.3.7 Faculty and Staff recruitment

- The Management is the authority to recruit staff as per the norms stipulated by the UGC, Government of Maharashtra and University.
- The vacancies that arise in the, general merit quota, as well as community merit quota are advertised separately in leading, dailies, sufficiently in advance. The interview panel comprises subject experts from university, a government, nominee, the principal and a representative of the management.
- Roaster System is strictly followed during Staff recruitment.

6.3.8 Industry Interaction / Collaboration

- Visits and research interactions with various industries and institutions are carried out on a regular basis.
- Various Departments have both formal and informal linkages and collaborations with other institutes of higher learning and these are utilized for the fruitful completion of curriculum and research work.
- The authorities are open-minded in interacting with other institutes for collaboration. Linkages were established with reputed organizations for placement and Career counselling

6.3.9 Admission of Students

Admission Process

- Information about admission is advertised in News paper and as per norms fixed by state Govt. and RTM Nagpur University, Nagpur transparency is maintained.
- Admission related matter hosted on the website
- All reservation policies are followed
- All given admissions are as per merit
- Hostel facilities are available for girl students only.

Programme for Admissions

- Admission process starts immediately after the declaration the result of HSSC Examination
- Online Registration system .Link is available on college web site and also in the Domain :shivajionline.com

6	1	XZ.	-1 f	0.00		ha	ma	s for
h	4	W	эт	are	SC	ne	mes	s tor

Teaching	Nil
Non	Nil
teaching	
Students	Student Book bank
	Student Aid fund

6.5 Total corpus fund generated	Rs. 1, 00, 000/-	·			
6.6 Whether annual financial audit h	as been done	Zes	٧	No	

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

Audit Type	External		Ir	nternal
	Yes/No	Agency	Yes/No	Authority
Academic	No	-	Yes	IQAC
Administrative	No	-	Yes	IQAC

6.8 I	Ooes the University/ Autonomous College dec	clare results within 30 days?		
	For UG Programmes	Yes No V		
	For PG Programmes	Yes No v		
6.9 V	What efforts are made by the University/ Auto	onomous College for Examination Reforms?		
The University decides the schedule of examination. The college has no power to				

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

College submitted proposal for obtaining autonomy.

- 6.11 Activities and support from the Alumni Association
 - Alumni meets are conducted.

interfere with the system.

- New office bearers were elected.
- Guest Lectures are conducted through alumni.
- Alumni in its annual meet freely and frankly present their views about the college and put up their suggestion what they deem fit for the betterment of the college.
- Several Departments invite the alumnae for extension lectures and share their expertise with the students.
- The alumnae of the college raised fund.
- Alumni Association provides a scholarship of Rs. 10,000/- every year to each of the three Economically Backward Students.

6.12 Activities and support from the Parent – Teacher Association

- The College has active Parent Teacher Association.
- The meeting of the Parent –Teacher Association held.
- A feedback is also collected from the parents/guardians in the form of a structured questionnaire.
- The parents get to know their ward's performance and their active participation in various activities.
- Parent-Teacher Association through its annual meet provides an opportunity to the parents and guardians to come close to the teachers of their wards and better understand their progress

6.13 Development programmes for support staff

The college organizes workshops for non-teaching staff to encourage them and to improve their working skills and sometimes the same is organized at parent society level.

- Computer Literacy programme.
- Personality Development Seminar.
- Communication class.
- ICT Basics Programme is organized.
- The faculties are sent for workshops and conferences organized by the UGC or other Institutions.
- Regular training programmes are organized for the entire faculty or faculties are sent for training program organized by other institutions.

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

- Use of polythene is strictly prohibited.
- Emphasis on more plantations to make environment clean and green.
- The initiative to make the campus eco-friendly.
- Various competitions were organized to create awareness on, use of Sanitary, waste disposal system, rain harvesting system.
- Greenery is maintained in the campus. The College makes all attempts to maintain a green campus by planting trees, landscaping, maintenance of floral gardens and so forth and keep the place as free of plastic as possible.
- Students are also required to switch off electric gadgets, and minimize the use of paper. Waste bins are provided extensively to prevent littering.
- A campus cleaning day is organized by NSS and NCC during Gandhi Jayanti.
- The Department of Botany has enhanced botanical garden in the campus.
- Solar panel for tapping solar energy is installed at Girls Hostel.
- The NCC/NSS unit of the College organized a campaign on anti plastic by distributing paper bags to the public.

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.

The innovations introduced during the last four years which have created a positive impact on the functioning of the college are given below.

- The feed back is sought from students, parents, alumni and management.
- The library is computerized with LIBMAN Software/ Bar-code, Audio-visual aids, special collection of books / literature in respect of competitive examination, INFLIBNET, N-list, Reprography facility etc.
- Booklet of news paper cutting and display of important notifications in library.
- The office administration is computerized.
- Uniform to students, non-teaching staff and apron to Laboratory staff.
- An innovative programme on "P.G.Diploma in Nanotechnology", 3 UGC funded and 6 self financed COC are introduced.
- Workshop on "Soil-less Rooftop Organic Farming" is conducted
- Workshops on "Apiculture", "Sericulture" and "Bird Nesting Preparation" are conducted for farmers and students.
- A workshop on "Bags Preparation from old and used sarees" is conducted.
- Residential Inspire Camp is organized every year since 2012-2013
- The Best teacher, Best researcher, Best service, Best Library user and Best student Kalpana Chawla awards are instituted.
- 11 Major research projects and 19 Minor research projects are completed/ongoing
- 07 Recognized center for higher learning and research
- MoU with research centers of International/National repute
- Incentives to staff members for publication of research work in refereed journals and to attend/present their work overseas.
- College has organized "International Conference on Mathematical Sciences" during 28-31, December 2012 and 03 International Conferences were organized in collaboration with other Institutions.
- The college publishes biannual Journal namely "Journal of Innovation in Sciences: Interdisciplinary Research Journal".
- All the departments have ICT facility and smart classrooms.
- NET/SLET coaching in Chemistry and guidance for MPSC, UPSC examination.
- King Edward Memorial Society offer scholarship through college for UG/PG/research students belonging to Central Provinces and Berar region.
- Earn While Learn Scheme for needy students.
- Health awareness programmes and workshops are arranged.
- Teacher Mentor scheme and Student-teacher-parent meet
- Uniforms/Books are provided to needy and poor students.
- Student-faculty exchange programme is organized
- Seminars/workshops/ sensitization programmes are organized to empower women at work place.
- Ladies Gymnasium is set up in the college.
- The campus is under electronic surveillance.

- 7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year
 - Ozone day rally conducted
 - Slogan and message writing competition conducted
 - Excursion tour held
 - Mentoring provided throughout the year.
 - Report Card Provided.
 - Issuance of identity Card to the students provided.
 - Meeting of Staff Council held twice in a year
 - Outreach Programmes organized.
 - Parent Teacher Meeting held.
 - E-books for departmental libraries throughout the year.
 - Updating knowledge and skills of teachers, Seminars and workshops organized throughout the year.
 - Departmental Society Meetings As per the departmental plans.
 - Meetings of Academic Coordinators Once in 2 months.
 - Team formed to implement the plan of doing student admission.
 - Remedial Classes were conducted for weaker sections/slow learners.
 - Academic Audit was done for all the departments.
- 7.3 Give two Best Practices of the institution (please see the format in the NAAC Self-study Manuals)

See Annexure-III

Efforts for Carbon neutrality:

- Regular plantation of saplings in the campus and maintenance of the same by NCC / NSS achieves carbon neutrality
- Efforts have been taken to make plastic free campus.
- Vermicompost is prepared out of the dry leaves and bio-degradable waste instead of burning

Plantation:

- Variety of trees are planted to keep campus green and to maintain bio-diversity
- Seasonal potted flowering plants are nurtured

Hazardous waste management:

- The department of Chemistry has fume hood, exhaust fans and proper ventilation is provided to expel hazardous gases.
- Special drainage system is installed in the chemistry laboratory to dispose the chemical wastes. Acids, alkalis & other Chemical are drained with plenty of water so that they get diluted & does not cause harm in the laboratories.
- Use of paper cups in college canteen
- Waste is collected by municipal agency regularly.
- College has installed Incinerator to dispose the organic wastes.
- Semi-micro techniques are used in department of chemistry to minimize the hazardous chemical wastes.

e-Waste Management:

- E-waste is given to recycling agency to reuse or dispose.
- Unserviceable batteries are replaced with new on buy-back basis.
- Old working computers, printers etc. are donated to the schools run by parent society. Our college carries out the following activities.

Roof-top (soil less) farming:

- Roof top farming units are installed at the terrace area of block-A building as a part of ecofriendly activity and for resource generation.
- Vegetables produced in the roof top farming partly fulfill the need of fresh vegetables for ladies hostel.

Installation of Bird nests:

- Artificial nests for birds are installed on the trees in the college campus for protecting them from scorching heat of the sun during summer season.
- Earthen pots are kept at accessible places to quench the thirst of bird.

Use of plants in college programmes and functions:

• The college has a practice of greeting guest on various occasions with sapling of ornamental or medicinal plants.

Eco-friendly activities:

- Department of Botany celebrates Eco-friendly holi/rakhi.
- Making of sari/paper bag under Best out of Waste.

Awareness programmes:

- Ozone day rally is organized by Department of Botany.
- Save tiger campaign, Save Nag-river campaign, World snake day programme is organized by

Department of Zoology. • Guest lectures are organized in the college of	on Wild life conservation, global warming etc.
7.5 Whether environmental audit was conducted?	Yes V No

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

STRENGTHS:

- A good infrastructure.
- Education at a low cost.
- Nationally recognized for providing high quality education.
- Well Qualified, Competent and Experienced Staff.
- Self financing PG Courses.
- Committed non- teaching staff.
- Interested and hard working students.
- Well furnished and equipped Laboratories.
- Safety environment for co-education.
- Number of options available with different subject.
- Certificate course in environmental studies.

WEAKNESS:

- Lack of land for future expansion of the campus.
- Lack of land for outdoor sports activities.
- Short of skilled based courses.

OPPORTUNITIES:

- Strategic alliances and partnerships with International.
- Diversification of sources of revenue through better exploitation of consultancy.
- Remedial teaching is provided to slow learners.
- Student faculty exchange.

THREATS:

- Competitions and growth of education institutions.
- Free education within the context of increasing trends of e-learning.
- To increase the qualifying rate of students in NET /SET examination.
- To reduce the dropout rate at UG & PG level.

8. Plans of institution for next year

- Enrichment of Eco-friendly Activities viz. Erecting solar lighting, solar water heater, plastic free campus
- Few State-of-Art class-rooms to be augmented.
- Enrichment of Academic activities viz. Organizing Seminars, Workshops in respective subjects, organizing Guest lectures, promoting faculties to attend Conference, Seminar, Workshop at different centres, Promoting Research activities by publishing their work in Journals, Recognition of faculties' work at different levels and rewarding them suitably. MOU to be established with concerned Departments, Promoting submission of Research projects with UGC, DST etc.

Name <u>Dr.G.R.Avachar</u>	Name <u>Dr.D.K.Burghate</u>
God	() Dia
Signature of the Coordinator, IQAC	Signature of the Chairperson, Iç

OAC



Terms and Vacation	Duration			
First term	16.06.2016 to 27.10.2016			
Winter vacation	28.10.2016 to 27.11.2016			
Second term	28.11.2016 to 30.04.2017			
Summer vacation	01.05.2017 to 15.06.2017			
ADMIS	SSION			
a. Admission Process start	After Declaration of 12th std. result			
b. Last Date of Admission	01.08.2016			
c. Last Date of Admission with the permission of Hon'ble Vice-Chancellor	01.09.2016			
d. Enrolment	Fifteen Days from the admission			
EXAMINATION	(UNIVERSITY)			
Winter Examination (Odd Semester)	19.10.2016			
Summer Examination (Even Semester)	02.05.2017			
EXAMINATI	ON (HOME)			
Internal Examination (Odd)	Announced time to time			
Test Examination (Odd)	Second week of October			
Internal Examination (Even)	Announced time to time			
Test Examination (Even)	Second week of April			
FUNCTION				
Felicitation of Merit Students	First Week of July			
Inauguration of Subject Societies	First Week of August			
Yuva Mahotsava	25th December to 27th December Every year			

Students' Satisfaction Report (Feedback Analysis 2016-17)

Feedback cell

Chairman: Dr. D.K.Bughate

Convener: Mrs. M.A.Pande

Members: Dr.(Mrs.) S.G.Kadu, All heads of the department

Aim: To achieve better position amongst all academic institutions.

Objective: To give better facilities to students enabling them to enhance their overall performance.

Feedback Report

I am extremely delighted to mention that SSES Amravati's "Science College "is one of the best colleges in Nagpur University. It believes in imparting the highest quality of education and grooming the students to fit in the corporate world. In its never ending quest to continuously upgrade itself, our endeavor is to monitor the satisfaction level of students so that we can give better service to the future batches.

In order to fulfill our endeavor we undertook surveys to carry out this study and observe areas where it can work to make our students more satisfied.

From the session 2016-17 we have started taking online feedback from every student. Parents' and Alumni' feedback forms are made available on the college website.

The report is then submitted to the honourable Principal Sir along with IQAC coordinator of the college for further action every year.

Students' feedback on teachers' performance (2016-17):

4 point scale is used to measure the quality level of each aspect.

3.50-4-Very Good (A), 2.50 -3.49 -Good (B), 1.50 -2.49 -Satisfactory (C), 1-1.49 -Unsatisfactory (D)

Sr.	Aspect	2016-17
no.		
1	You are inspired in subject matter	3.27
2	Curriculum coverage	3.18
3	Your doubts are properly answered.	3.25
4	You are able to understand lecture clearly.	3.3
5	You are able to contact the faculty outside the	3.25
	class	

6	Subject material provided by the faculty is sufficient.	3.2
7	The student-teacher relation is cordial.	3.33
8	Overall rating	3.25

Feedback analysis (2016-17

Feedback on facilities provided to students (Measured on 10 point scale)

Sr.	Parameter	2016-17
no		
1	Teaching method is appropriate and effective.	8.63
2	Able to make you more objective.	7.75
3	Library facilities	8.75
4	Laboratory facilities	8.38
5	Computer/internet facility	6.88
6	Maintenance of general amenities	7.63
7	The office staff attend to matters related to	8.88
	Fees	
	Examination work	8.63
	Scholarships	8.38
	General administration	8.25

Exit Questionnaire for B.Sc.III students (2016-17)

Students' overall Evaluation of the programme and Teaching

Sr No	Aspect	% responses of options from students			
		a	b	c	d
1	The syllabus of each course was	50		50	
2	Was the course easy or difficult to understand?	37.5	50	12.5	
3	How much of the syllabus was covered in the class?		50	37.5	12.5
4	To what extent were you able to get material for the prescribed readings?	37.5	50		12.5
5	What is your opinion about the library material and facilities for the course?	25	50	25	
6	How well did the teacher prepare for the classes?	75	12.5	12.5	
7	How well was the teacher able to communicate?	25	50	12.5	12.5
8	How far the teacher encourages student participation in class?	50	25		25
9	If yes, which of the following methods were used?	12.5	50	25	12.5
10	How helpful was the teacher in advising?	37.5	37.5	12.5	12.5
11	The teacher's approach can best be described as	37.5	25	25	12.5
12	Internal assessment was	37.5	12.5	37.5	12.5
13	What effect do you think the internal assessment will have on your course grade?	37.5	50	12.5	
14	How often did the teacher provide feedback on your performance?	37.5	25	25	12.5
15	Were your assignment discussed with you?	37.5	25	12.5	25

Feedback on Curriculum (2016-17)

Sr	Aspect	% responses of options from students			
no		a	b	c	d
1	The syllabus of each course was	46.15		53.85	
2	Was the course easy or difficult to understand?	34.62	46.15	19.23	
3	How much of the syllabus was covered in the class?	30.77	61.54	3.85	3.85
4	To what extent were you able to get material for the prescribed readings?	53.85	46.15		
5	What effect do you think the internal assessment will have on your course grade?	88.46		3.85	7.69
6	If you have other comments to offer on the course and suggestions for teacher you may do so in the space given below.	No comments			

Report of action taken on the feedback from students

Having received the report of feedback analysis on individual teacher's performance, an interaction is arranged with such teachers who lack certain skills in terms of teaching. Those teachers are given certain tips to bring about improvement in their teaching so as to make it more intelligible and beneficial to the students. Following this exercise we have come across the fact that this exercise proved to be fruitful. We appreciate those who are adjudged as good teachers. Similarly the feedback of students in terms of infrastructure, ambience in the college and facilities provided to them, the proactive measure are adopted with the hope that the students will have pleasant and satisfactory experience during the period of their stay in the college. Whenever the college receives genuine suggestions from the students, an attempt has been made to fulfill the same, if necessary, budgetary provisions are made in this regard.

Best Practice-I

- 1. Title of Practice "Soil-less Rooftop Organic Farming"
- 2. Goal: To provide low cost eco-friendly farming, an alternative to retrench agricultural land.
- 3. The context: The agriculturists in India are facing a big problem of supplying food to ever increasing population as agricultural land is decreasing due to fast growing urbanization and industrialization. The food we consume is contaminated due to extensive use of pesticides/insecticides/chemical fertilizers. The quality of soil is also degraded. These problems need to be addressed. An alternative solution to overcome above problems is the Soil-less Rooftop Organic Farming, wherein use of vermicompost and harmless biopesticides are promoted.
- 4. **The practice**: Staff & students of the college initiated the concept of Roof-top Organic Farming. 9' X 6' feet container is designed with underlying polymer sheets. Coco-peat and vermicompost is mixed in 60:40 ratios with addition of 20% azotobactor and30% neem powder. Drip irrigation system is used. Green nets are provided over the kits. During rainy season, it is further covered with plastic sheets. The ideas are derived from green house. The attributes of green house are inculcated in this practice. All small rooted crops can be cultivated such as chillis, brinjal, tomato, spinach, corriander, fenugreek, cucumber, bitter gourd, cabbage etc.
- 5. **Evidence of Success:** Students participated in 5th Indian Youth Science Congress Kolkata and 6th Indian Youth Science Congress, Guntur (A.P.), where the project on "Soil-less Roof Top Organic Farming" was selected as 3rd most relevant innovation to solve zero hunger challenge at national level.
- 6. The vegetables produced through this best practice are sold to the staff member and nearby locality and also used in girls' hostel mess.
- 7. Prof. M. S. Swaminathan, father of green revolution visited the college and appreciated the project. Our students of B. Sc. Biotechnology have developed the further technology called Hydroponic-Organic roof top farming, which is cost effective as compared to conventional Soil-less Roof Top Organic Farming. This project was displayed at Raman Science Centre, Nagpur.
- 8. Problems encountered and resources required:

Polymer sheets, Coco-peat, vermicompost, azoato-bactor, neem powder, Green nets and plastic sheets, PVC Pipes.

- 9. Notes: The source of this project is available in the form of CD, Print-Media. Expertise on this project is available. The various News Channels and Print Media made this concept of "Soil-less Roof Top Organic Farming" popular.
- 10. Links: www.youtube.com/watch?v=Ng3hsRZ16ts

http://www.nagpurtoday.in/roof-top-organic-farming-an-a-unique-initiative-by-the-students-of-shivaji-science/02032152

11. Contact Details:

Name of the Principal: Dr. D K Burghate

Name of the Institution: SSES Amravati's Science College, Congress Nagar

City: Nagpur Pincode: 440 012

Work phone: 0712-2423432 Fax: 0712-244095 Mobile: 09422306680

Website: www.sscnagpur.edu.in e-mail: drdkburghate@gmail.com

Best Practice-II

- 1. Title of the practice: Residential Camp on "An Awareness About Future In Basic Sciences"
- **2. Goal:** The goal of the residential camp is to encourage brilliant students to take up basic sciences as career, to inculcate culture of science among new generation, to encourage them to carry out research in basic sciences and to expose them to new avenues and related career opportunities.

3. The context:

The college has great potential and provides many career opportunities to the students. However, the present scenario depicts that the best brain go to medical and engineering streams and other professional courses. Therefore it is necessary to encourage young talent to take up science as career. In order to motivate young and enthusiastic brains in the field of research, Department of Science and Technology, New Delhi sponsored an awareness programme-Innovation in Science Pursuit for Inspired Research (INSPIRE) for the students.

The college is a premier institute in Central India and has potential to attract brilliant students in and around the region. To materialize the goal, the college organizes residential camp on *Awareness about future in basic sciences* every year since 2012.

4. The practice:

It is a regular practice in the college since 2012 to organize a residential camp *on An awareness about future in Basic Sciences*. This practice helps to attract the brilliant students to seek admission in U G Programme of basic sciences.

The aim of the residential camp is

- To make the basic sciences more interesting
- To familiarize students with the concepts and innovations in science
- To create awareness among the students regarding various career opportunities
- To motivate the students for research career in basic sciences.

Duration of this residential camp is of five days in which 70% lectures and demonstrations are pertaining to *disciplinary content* in Physics, Mathematics, Chemistry, Biology and Earth sciences which emphasize key concepts while 30% lectures and demonstrations highlight the features of interdisciplinary approach.

The lectures and demonstrations/experiments/field visit are focused on various themes such as Energy, Earth, Environment, Wildlife conservation, India's Moon mission, Epidemic diseases, Unknown domains of science, Research and career opportunities etc.

The college provides registration kit containing list of mentors, resource persons, their affiliation, name of topic and contact number of local persons.

The college also provides T-shirts, caps, transportation facility, accommodation, local hospitality, certificate of participation, science books, prizes and home experimental kit.

The students have opportunity to interact with renowned academicians, distinguished researchers and eminent scientists of national and international repute.

The other academic activities carried out in the workshop are CD shows, discussions, experiment sessions, seminars, science quiz, sky watching programme and field visits.

Feedback about the workshop is collected from mentors and students.

The details of the residential camps organised by the college is given below.

S. No.	Activity	Fundin g Agency	Amount Duration Sanctioned		Number of students	
3	INSPIRE 2016-17	D.S.T.	13 Lac	20th to 24th ,Dec 2016	200	

Following Resource persons / Mentors of national and international repute are invited

- 1. Padmabhushan Dr. Vijay Bhatkar, Chairman, Board of Governors, IIt, New Delhi
- Dr. N Sivasubramanium, Senior Scientist, Nadar Mahajan Sangam, S. Vellaichamy Nadar College, Madurai

- 3. Dr. K B Gopalan, AIR, Hydrabad
- 4. Dr. C P Rao, IIT Powai, Mumbai
- 5. Dr. B Dey, Department of Physics, University of Pune
- 6. Dr. Sanjay Deshmukh, Vice Chancellor, Mumbai University, Mumbai
- 7. Dr. S Balsubramanium, Jawaharlal Neharu Centre for Advance Science Research, Bengaluru
- 8. Dr. Shekhar C. Mande, Director, National Centre for Cell Science, Ganeshkhind, Pune
- 9. Dr. Sharmila Mande, Head of Bio-Sciences R&D, TCS Innovation Labs TCS Ltd.54-B, Hadapsar Industrial Estate Pune
- 10. Dr. Suresh Haware, A Nuclear Scientist, Philanthropist Vashi, Navi Munbai
- 11. Dr. Sharmila Mande, Head of Bio-Sciences R&D, TCS Innovation Labs TCS Ltd.54-B, Hadapsar Industrial Estate Pune

5. Evidence of Success:

Around 565 students are benefitted from three residential INSPIRE camps.

The INSPIRE scholarship instituted by DST to the tune of Rs. 80, 000/- per student per year has been awarded to eight students of this college. More students are motivated to make career in basic sciences. This is quite visible from the fact that the students with good percentage and the students from lower strata of society seek admissions for basic sciences.

The students became more confident in presentation of their work in the form of model, paper, quiz competition etc.

The residential camp encourages the students to take up careers in science.

6. Problems encountered and Resources required:

Brilliant students are inclined towards professional studies since they are unaware of the avenues in pure sciences.

Technology oriented teachers, sincere students, spacious auditorium, well-equipped laboratories, ICT facility, renowned resource persons/ academicians /mentors with social commitment, distinguished researchers and eminent scientists of national and international repute.

7. Notes:

Such camps help to develop Research and Development activities in basic sciences.

These activities elevate the thinking process among the stakeholders.

Print media has given a wide coverage to the deliberations of distinguished researchers and eminent scientists during the INSPIRE camp.

8. Contact Details:

Name of the Principal : Dr. D. K. Burghate

Name of the Institution : SSES Amravati's Science College, Congress Nagar

City : Nagpur Pin code : 440 012

Accredited status : A grade with CGPA 3.26

Work phone : 0712-2423432

Website : <u>www.sscnagpur.edu.in</u>

Fax : 0712-244095 Mobile : 09422306680

e-mail : drdkburghate@gmail.com,

shivajiscience_ngp@yahoo.com