### Sant Gadge Baba Amravati University



# ANNUAL QUALITY ASSURANCE REPORT

(July 2015 – June 2016)

SUBMITTED TO
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL, BANGLORE

#### Annual Quality Assurance Report (AQAR) of the IQAC

#### Part - A

1.	Detail	ls of	the	Institution

1.1	Name of the Institution:	Sant Gadge Baba Amravati University
1.2	Address Line 1:	Camp
	Address Line 2:	University Campus
	City / Town:	Amravati
	State:	Maharashtra
	Pin Code:	444602
	Institution e-mail address:	vc@sgbau.ac.in provc@sgbau.ac.in
		reg@sgbau.ac.in
	Contact Nos.	0721-2662173, Fax: 2660949
	Contact Nos.	0/21-20021/3, Fax: 2000949
	Name of the Head of the Institution:	Dr. Muralidhar Chandekar
		Vice Chancellor
	Tel. No. with STD Code:	0721-2662373 , Fax: 2662135
	Mobile:	+919822567712
	Name of the IQAC Co-ordinator:	Dr. S. F. R. Khadri
	Mobile:	+919423425393
	IQAC e-mail address:	diriqac@sgbau.ac.in
1.3	NAAC Track ID	MHUNGN10062
1.4	NAAC Executive Committee No. &	EC/(SC)/11/A&A/14.3 dated 19/01/2016
	Date:	
1.5	Website address:	www.sgbau.ac.in
	Web-link of the AQAR:	www.sgbau.ac.in/iqac.asp

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#### 1.6 Accreditation Details:

SN	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	В	71.80 Institution Score	2002	2007
2	2 <sup>nd</sup> Cycle	В	2.63 CGPA	2010	2015
3	3 <sup>nd</sup> Cycle	A	3.07 CGPA	2016	2021

1.7	Date of Establishment of IO	QAC:	01/	05/2006				
1.8	AQAR for the year:		201	5-2016				
	Details of the previous year's Accreditation by NAAC:	AQAR submit	ted to N	NAAC aft	ter the lates	t Assessn	nent and	
	AQAR 2014	-15 submitted to	o NAA	C				
1.10	Institutional Status:							
	University: State	te 🗸 C	Central		Deemed		Private	
	Affiliated College:	Y	/es		No			
	Constituent College:	Y	l'es		No			
	Autonomous College of UC	GC: Y	l'es		No			
	Regulatory Agency approv Institution (eg. AICTE, BC MCI, PCI, NCI)		l'es .		No			
	Type of Institution:	Co-Education	n [	$\checkmark$	Men		Women	
		Urban		✓	Rural		Tribal	
	Financial Status:	Grant-in-aid		✓	UGC 2(f)		UGC 12B	<b>✓</b>
	Gran	t-in-aid + Self l	Financi	ng		Totally S	elf-financing	
1.11	Type of Faculty/Programme	:						
	Arts Science	✓ Comr	merce	✓ L	Law v	PEI (	Phys Edu)	$\checkmark$
	TEI (Edu) ✓ E	ngineering 🗸	Н	lealth Sci	ence	M	lanagement	<b>√</b>
	Others (Specify) Hor	ne Science, Pha	armacy	, Social S	Science			

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1.12	Name of the Affiliating University (for the	ne Colleges)		N.A.	
1.13	Special status conferred by Central/ State	Government -	· UGC/CSIR/	DST/DBT/ICM	IR etc:
	Autonomy by State/Central Govt. / University	ersity Sta	ate		
	University with Potential for Excellence		U	GC-CPE	
	DST Star Scheme		U	GC-CE	
	UGC-Special Assistance Programme	$\checkmark$	D	ST-FIST	✓
	UGC-Innovative PG programmes	$\checkmark$	Any other (Specify)	DBT Bioinfo	
	UGC-COP Programmes		L		
2. IQAC C	omposition and Activities				
2.1 No	. of Teachers	06			
2.2 No	. of Administrative/Technical staff	03			
2.3 No	. of Students	02			
2.4 No	. of Management Representatives	02			
2.5 No	. of Alumni	01			
	o. of any other Stakeholder and mmunity Representatives	01			
2.7 No	. of Employers/ Industrialists	01			
2.8 No	. of other External Experts	01			
2.9 Tot	al No. of members	17			
2.10 N	o. of IQAC meetings held	05			
2.11 N	To. of meetings with various stakeholders:	F	Faculty 05	Nonteach	ning 01
	Students 01 Alumni	01	Others 01		
2.12 H	as IQAC received any funding from UGC	during the year	r? Yes	No	√
	If yes, mention the amount				

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#### 2.13Seminars and Conferences (only quality related)

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

Total Nos.	International	National	State	Institute Level
03			01	02

#### (ii) Themes

- Accreditation Awareness for affiliated colleges and professional colleges
- Role of Universities in creating skilled human resources towards: Start –up India, Make in India, Skill India.
- Accreditation Awareness (NBA) workshop for professional colleges

#### 2.14 Significant Activities and contributions made by IQAC

- Accreditation Awareness workshop for affiliated colleges
- Accreditation Awareness (NBA) workshop for professional colleges
- Regional orientation programme regarding NAAC in collaboration with Regional Joint Director, Higher Education, Government of Maharashtra.
- Environment audit for the environment monitoring of the campus.
- "Avishkar Cell" was established for students and researchers of the University as well as from affiliated colleges to inculcate research culture among the students in tune with IQAC.

#### 2.15 Plan of Action by IQAC/Outcome:

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

Plan of Action	Achievements
Automation and computerization of	IQAC has recommended for Automation and
Examination and administration	computerization of Examination system which has been
processes	implemented.
Introduction of Vocational Courses	The IQAC has suggested for introduction of B. Voc courses.
Focused efforts for increasing number	IQAC has encouraged the faculty members for
of funded research projects, patents and	submission of research projects, patents and to
consultancies	undertake the consultancies.
NAAC Peer team report	The recommendations made by NAAC peer team report have been circulated and efforts have been made for its implementation.
To raise the infrastructural facilities	IQAC has recommended for construction of laboratories and class rooms for the Physics, Chemistry and Geology departments.
Establish Centre of Excellence	IQAC has recommended to Centre of Excellence in the university campus.

2.16 Whether the AQAR was placed in statutory body:	Yes 🗸	No	

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Management	Syndicate	Any other body 🗸
Provide the details of the act	ion taken:	
The AQAR essentially been	placed before the IQAC and M	IC for perusal and suggestions

The AQAR essentially been placed before the IQAC and MC for perusal and suggestions thereof. After discussions at length and deliberations in the meetings of IQAC and MC, the necessary revisions had been carried out in the AQAR. The IQAC and MC have finally approved the same for onward submission to the NAAC.

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#### Part - B

#### Criterion - I

#### **Curricular Aspects**

#### 1.1 Details about Academic Programmes

Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
32			
25			
01			
03			
61			
02			
	existing Programmes  32 25 01 03	existing Programmes added during the year  32 25 01 03 61	existing Programmes         programmes added during the year         self-financing programmes           32             25             01             03                  61

Interdisciplinary	02	 	
Innovative	03	 	

#### 1.2 (i) Flexibility of the Curriculum:

CBCS/Core/Elective option / Open options CBCS for P. G. Courses in the Faculty of Science, Engineering and Technology. Core options for the courses in the Faculty of Engineering and Technology and Elective options for PG programs in Science, Humanities and Commerce and Management

#### (ii) Pattern of programmes:

Pattern	Number of programmes
Semester	23
Trimester	
Annual	5

1.3 Feedback from stakeholders* (On all aspects)	Alumni	<b>✓</b>	Parents	<b>✓</b>	Employers	✓	lidents	<b>✓</b>	
Mode of feedback :	Online		Manual	✓	Co-operating	g scho	ools (for F	'EI)	

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<sup>\*</sup>Please refer Annexure-II for an analysis of the feedback

- 1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.
  - Since the syllabi revision and thereby upgradation is a continuing process after the completion of every three years, the syllabi of some professional and elective subjects have been revised and updated with a view to keep abreast recent state-of-the art.
  - The ICT contents have been enhanced in the relevant subjects and courses.
  - The research aspects to promote CBCS pattern have been given due place in the revision of syllabi of the courses under the faculty of Arts and Commerce in under graduate studies.

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

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#### Criterion - II

#### **Teaching, Learning and Evaluation**

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
120	65	29	17	09

2.2 No. of permanent faculty with Ph.D.

63

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

As	st.	Asso	ciate	Profe	essors	Others		To	tal
Profe	essors	Profe	ssors						
R	V	R	V	R	V	R	V	R	V
00	00	00	00	00	01	00	00	00	01

2.4 No. of Guest and Visiting faculty and Temporary faculty

60	9	110
00	9	

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	44	81	25
Presented papers	78	86	4
Resource Persons	22	66	14

- 2.6 Innovative processes adopted by the institution in Teaching and Learning:
  - Organization of industry institution interaction workshops for the students
  - Organization of orientation programmes to inculcate the essential research culture amongst the students
  - Introduction of simulation based learning for students by using ICT tools
  - In addition to interactive learning through interactive pads and other blended techniques such as experiential learning through models, soft skills improvements through the workshops have been achieved.
  - Use of Mission 10X techniques and Dale Carnegie methods for teaching learning

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

184

- 2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)
  - Online End to End solution has been applied for the faculties of Engineering and technology, Law and Home Science and is under process for extending to other faculties.
  - Bar coded answer sheets have been used for all examinations.
  - Photocopy of answer sheets on demand
  - Digitization of tabulation registers is in process.

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

23 16 23

2.10 Average percentage of attendance of students

85

2.11 Course/Programme wise distribution of pass percentage:

Title of the	Total no.					
Programme	of students appeared	Distinction %	Ι %	II %	III %	Pass%
M.Sc.	20	00	20	00	00	20
(Applied Elect.) M.Sc.						
(Chemistry)	27	22.22	44.44	3.70	00	70.37
M.Sc. (Physics)	29	17.24	27.58	3.4	00	48.27
M.Sc. (Botany)	27	11.11	59.25	00	00	70.37
M.Sc. (Zoology)	25	44	32	4	00	80
M.Sc. (Microbiology)	25	60	40	00	00	100
M.Sc. (Geology)	19	15.78	57.89	5.26	00	78.93
M.Sc. (Biotech)	14	35.71	50	00	00	85.72
M.Sc. (Home Sci)	25	24	40	4	00	68
M.Sc. (Mathematics)	26	3.84	26.92	19.23	00	50
M.Sc. (Statistics)	17	11.75	00	00	00	11.76
M.Sc. (Computer Sci.)	18	00	44.44	00	00	44.44
P.G.D.C.S. (Computer Sci.)	23	8.69	39.13	00	00	47.83
M.C.A. (Computer Sci.)	61	6.55	52.45	00	00	57.37
M.E. (CSIT)	27	00	44.44	00	00	44.44
M.A. (Hindi)	10	00	50	10	00	60
M.A. (Marathi)	19	00	10.52	10.52	31.57	52.63
M.A. (Sociology)	23	00	00	17.39	17.39	34.78
M.A. (English)	10	00	00	10	00	10
B.Tech. (Chem. Tech.)	70	1.42	71.42	00	00	72.84
M.Tech. (Chem Tech.)	08	62.5	25	00	00	87.25
B. Lib. (Library Sci.)	24	00	87.5	00	00	87.5

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M. Lib. (Library Sci.)	20	35	00	15	00	50
M. B. A.	45	33.33	40	00	00	73.33
M.P. Ed. (Physical Ed.)	29	00	68.96	00	00	68.96
L.L. M. (Law)	19	00	36.84	00	00	36.84
P. G. Diploma Law in Human Resource and Education	10	00	20.00	00	00	20.00
M. Ed. Education	29	00	100	00	00	100
M.A. (Gender Women Studies)	09	00	11.11	88.88	00	100

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

- The IQAC has suggested for organization of skill oriented programmes for students and faculties.
- IQAC suggests some outcome oriented programmes to be included in the academic calendar.
- Proper implementation of the academic calendar is monitored by the IQAC.
- It also monitors the teaching plans, schedules for internal and continuous assessments.
- IQAC has provided ICT tools like interactive boards to all teaching departments in the University to enhance ICT based interactive teaching learning process.
- The IQAC monitors the performance of the teachers in particular and the proper execution of teaching learning process by way of inviting feedbacks and evaluation of the APIs of the teachers.

#### 2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	16
UGC – Faculty Improvement Programme	02
HRD Programmes	04
Orientation Programmes	04
Faculty exchange programme	0
Staff training conducted by the university	09
Staff training conducted by other institutions	16
Summer / Winter schools, Workshops, etc.	0
Others	0

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#### 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	342	68	Nil	Nil
Technical Staff	87	04	Nil	Nil

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#### Criterion – III

#### 3. Research, Consultancy and Extension

- 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution
  - Organization of Avishkar, the research convention
  - Establishment of Research Consortium
  - Establishment of Avishkar Cell
  - Organization skill oriented workshops for students
  - Providing sophisticated instrumentations to promote research
  - Encouraging the faculty to file patents by deputing teachers for IPR workshops
  - Frequent organization of research seminars in teaching departments

#### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	03	11	03	08
Outlay in Rs. Lakhs	52.20	189.67	43.15	342.15

#### 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number				
Outlay in Rs. Lakhs				

#### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	286	44	00
Non-Peer Review Journals	01	08	02
e-Journals	28	00	00
Conference proceedings	25	46	00

#### 3.5 Details on Impact factor of publications:

 Range
 0.22-4.15
 Average
 5.2
 h-index
 2-44
 Nos. In SCOPUS
 80+

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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
	3 years /	UGC	32,06,000/-	20,91,000/-
	5 years	SERB	36,10,000/-	27,00,000/-
		SERB (FST)	16,53,000/-	10,00,000/-
Major Project		DST	28,49,000/-	16,80,000/-
		DST	36,77,150/-	15, 91,875/-
		(Indo-Argentina)		
		AICTE	12,35,294/-	11,11,765/-
Minor projects	-	-	-	-
Interdisciplinary project	-	-	-	-
Industry sponsored	-	-	-	-
Projects by the University/College	-	-	-	-
Students research	3 years /	UGC		
project (Other than	5 years	DST		
compulsory by the University)		UGC		
Any other (Specify)				
Total			1,62,30,444/-	1,01,74,640/-

3.7 No. of books pu	blished i) Wi	th ISBN 13	Chapters in Edited Books	20
	ii) Withou	ut ISBN 01		
3.8 No. of University	Departments receiving fund	ds from		
UGC-SA	AP 02	CAS	DST-FIST	02
DF	PE		DBT Scheme/Funds	01
3.9 For colleges	Autonomy	CPE	DBT Star Scheme	
	INSPIRE	CE	Any Other (specify)	

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3.10 Revenue generated through consultancy

1,30,490/-

3.11 No. of conferences organized by the Institution:

Level	International	National	State	University	College
Number	1	3		3	
Sponsoring					
Agencies					
UGC	International Conference on "General Relativity"				
UGC- DBT/ Marathi Vidnyan Parishad, Mumbai			SGBAU, Amravati , Marathi Vidnyan Parishad, Mumbai		
UGC		National Conference on "Reform innovations in Home Science Curriculum"			

<u>-</u>	
3.12 No. of faculty served as experts, chairpersons or resource persons	88

13.90

3.13 No. of collaborations International 12 National 22 Any Other 04

3.14 No. of linkages created during this year 29

3.15 Total budget for research for current year in lakhs:

From funding agency 12.90 From Management of University/College 1.00

3.16 No. of patents received this year

Total

Type of Patent		Number
National	Applied	02
	Granted	
T	Applied	
International	Granted	
Commercialised	Applied	
	Granted	

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

Total	International	National	State	University	Dist	College
09	8	1	0	0	0	0

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

57	
218	

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

57	
.)/	

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

JRF	08	SRF
-----	----	-----

08

Project Fellows 08 Any other

08

3.21 No. of students participated in NSS events:

University level	1150	
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State level 216

National level 15

International level

3.22 No. of students participated in NCC events:

State level 197

National level 23

International level

3.23 No. of Awards won in NSS:

University level 17 State level 06

National level

International level

3.24 No. of Awards won in NCC: N.A.

University level

State level

National level

International level

3.25 No. of Extension activities organized:

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University forum	13	College forum	00		
NCC		NSS	06	Any other	03

- 3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility
  - Celebration of national technology day by IQAC.
  - Energy conservation and LED lamp fabrication workshop was organized by department of Applied electronics for junior college students as a part of energy conservation drive.
  - Organisation of health and fitness fare by department of physical education to create awareness about health and fitness among the university employees and students.
  - Dr. Motilal Rathi Workshop on Public Awareness about Public Health was organized for awareness about "Breast Cancer" among women.
  - Sustainable technology show was organised under Teaching Research Development Extension Activity and Centre of Social Health and Public Hygiene by the Department of Home Science.
  - Workshop on Music for Stress Management was organized under TRDEA activity in collaboration with IQAC.
  - Established Centre of Swatchh Bharat-Swasth Bharat under UGC scheme.
  - To create social responsibility among the students the Blood donation camp was organized by Department Chemistry.
  - Environmental Protection Awareness Program in the eve of Ozone day celebration in terms of poster presentation.
  - To inculcate the environmental awareness among the students, World Environmental Day and tree plantation programmes were organized by Department of Botany.
  - Seminar Competition was organized on the eve of Wild-Life Week Celebration-2015by Department of Zoology.

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#### 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	447.06 Acre			447.06 Acre
Class rooms	4104.14 sqm		UGC,	4104.14 sqm
Laboratories	5390.60 sqm		Government	5390.60 sqm
Seminar Halls	1736.16 sqm		Grant, University Fund	1736.16 sqm
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	44 77	05 52	UGC/ Govt. University Fund	49 129
Value of the equipment purchased during the year (Rs. in Lakhs)	228.76 lacs 216.13 lacs	182.92 158.17	UGC/ Govt. University Fund	411.68 374.30

#### 4.2 Computerization of administration and library

- The Computerization of administrative sections such as Collegiate Section, B.C.U.D., Finance and General Administration is completed.
- Establishment of four advance servers in University library for SOUL, off-campus accessibility of e-recourses and development of digital library.
- Digitization of Ph.D. thesis, uploading in "Shodhganga" repository and digitization of old question papers.
- Extension of library consortium.

#### 4.3 Library services:

	Existing		New	ly added	Total	
	No.	Value (in lacs)	No.	Value (in lacs)	No.	Value (in lacs)
Text Books / Reference Books	1111864	6,54,12,976	2984	39,65,372	1114848	6,93,78,348
e-Books	126	9,50,395			126	95.03
Journals	117	2.98	91	1.68	208	4.66
e-Journals	10000+	47, 39,548	153	5,49, 188	10000+	52,88,736
Digital Data base	9	17, 39,310			9	32,00,730
CD and Video	1066	-	-	-	1066	
Others (specify):						
• Theses	2975					
• Dissertation	37217					

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4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart ments	Others
Existing	756	30		01	01	07	22	Increase in number
Added	150	00	1 GBPS	00	00	01	01	of nodes through
Total	906	30	Leased Line	01	01	08	23	LAN infrastruct ure project of NME- ICT

- 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)
  - Wi-Fi connectivity in the campus.
  - IQAC in collaboration with Microsoft organized a work shop on Internet of Things (IOT) and Cloud for faculties and students.
  - Workshop on Network Simulator for PG and Research students and teachers was organized.
  - Online application for revaluation mechanism
  - Android, Windows and IOS based Mobile app for revaluation system
  - Laboratories equipped with video streaming facility through e-learning tools
  - Use of MOODLE and FOSS in teaching
  - Open access to net-enabled computers for teachers and students
  - Adoption of IT Policy for secured network access on campus
  - Regular use of **A-view** (e-learning tool) for interactive multicasting lectures, power point presentations etc.
- 4.6 Amount spent on maintenance in lacs:

i) ICT	5.78
ii) Campus Infrastructure and facilities	124.21
iii) Equipments	31.47
iv) Others	7.32
Total:	168.78

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#### Criterion - V

#### 5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
- Suggested for development of mobile app for various student support services like revaluation, etc.
- Establishment of district-wise centres for acceptance of examination forms
- Toll Free Number for Examination Enquiry
- Establishment of Examination Enquiry Centre
- Organization of Institution Industry Interactions for suggestions in curriculum development and employment opportunities
- Starting a stationary and reprography facilities for students by Employees Credit Cooperative Society
- Establishment of various committees for dealing with complaints against sexual harassment as per the guidelines of SAKSHAM report of UGC
- Upgradation of recreation facilities in the hostels
- 5.2 Efforts made by the institution for tracking the progression
- Evaluation of students through Open book test, Term End Examination and Seminar activities.
- Organization of Parent-teacher meets for tracking progress, feedback regarding the curriculum and development of institute.
- Organization Quiz competitions, debates, skill oriented trainings.
- Organization of alumina meets to build a bridge between the alumina and students, for feedback regarding the Upgradation of syllabi and tracking the employability.
- Organization of ICT training programmes for students
- 5.3 (a) Total Number of students

UG	PG	Ph. D.	Others	
243	1309	233	31	

(b) No. of students outside the state

12

(c) No. of international students

--

Women

No % 999 62.80

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	<b>Last Year (2014-15)</b>						Thi	s Year (2	015-16)		
General	SC	ST	OBC	Physically Challenged		General	SC	ST	OBC	Physically Challenged	Total
529	275	43	736	0	1583	508	265	56	779	1	1609

Demand ratio: 1:4

Dropout %: less than 1%

- 5.4 Details of student support mechanism for coaching for competitive examinations (If any)
  - Centre for coaching for competitive examination
  - Coaching classes for the preparation of NET exam for SC, ST & minorities students
  - Provision of separate reading room for the students preparing for competitive exams in library along with extended timings
  - Online access to various study material at Student Access Centre

No. of students	beneficiaries
-----------------	---------------

5.5 No. of students qualified in these examinations

NET	24	SET/SLET	14	GATE	06	CAT	
IAS/IPS etc		State PSC		UPSC		Others	

- 5.6 Details of student counselling and career guidance
  - Organized lectures on Career Opportunities in Food Science and Nutrition, Resource Management and Communication and Extension.
  - Counselling and career guidance to students through organization of special module workshops
  - Organization of special lectures and workshops by experts regarding counselling and career guidance
  - Notice board displays for career opportunities
  - Publication of career guidance bulletin
  - Organization of campus placement drives

No. of students benefited | 623

#### 5.7 Details of campus placement

	Off Campus		
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
14	70	20	63

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<b>-</b> 0	D . 11	c	1		
אר	Details	Ot.	gender	sensifization	programmes
$\mathcal{I}$	Details	$\mathbf{o}_{\mathbf{I}}$	gondor	SCHSHIZAHOH	programmes

- Organization of gender sensitization programmes by Women Studies Centre
- Celebration of International Women's' Day
- Capacity Building Programmes for women in higher education
- Organization of lectures by specialized experts regarding safety and security of women through ICT – Tools and techniques

5	a	Students	Activi	tiac
7	9	Silidents	ACI1V1	ries

5.9.1	No	of students	narticinated	l in 9	Sports	Games	and other events	c
J.9.1	INO.	or students	participated	1  III  7	oports,	Gaines	and other event	S

State/ University level 354 National level 337 International level 01

No. of students participated in cultural events

State/ University level 66 National level 30 International level 10

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

Sports: State/University level 05 National level 06 International level 00

Cultural: State/University level 23 National level 04 International level 00

#### 5.10 Scholarships and Financial Support

	Number of students	Amount (in lacs)
Financial support from institution		
Financial support from government	621	85.64
Financial support from other sources	07	16.05
Number of students who received International/ National recognitions		

#### 5.11 Student organised / initiatives

Fairs: State/ University level 02 National level -- International level --

Exhibition: State/ University level | 02 | National level | -- | International level | --

5.12 No. of social initiatives undertaken by the students 21

5.13Major grievances of students (if any) redressed: NIL

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#### Criterion - VI

#### 6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution:

#### Vision

To emancipate the youth from the darkness of ignorance for elevation of the society by imparting knowledge and fostering wisdom at its' plentiful

#### Mission

To contribute to the society through the pursuit of education, learning and research at the highest level of excellence

6.2 Does the Institution has a Management Information System

Yes

- 6.3 Quality improvement strategies adopted by the institution for each of the following:
- 6.3.1 Curriculum Development
  - Organization of need based curriculum development programmes for various professional courses
  - Designing of skill based programmes under the Department of Lifelong Learning and Extension
  - Implementation of B.Voc. programmes
  - Revision and upgradation of syllabus as per the development of subject
  - Organization of meetings of stake holders (parents, alumni, experts from industries and other research institutes) for development of curriculum
- 6.3.2 Teaching and Learning
  - Smart classrooms
  - Emphasis on ICT based teaching
  - Applications of e-learning, simulations, animations, online demonstrations etc.
  - Organization of webinars and online expert lectures

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- Use of e-Pathshala
- Use of MOODLE, FOSS, MOOCs

#### 6.3.3 Examination and Evaluation

- Application of online revaluation system with mobile app and sms alerts
- End to end programme for examination system
- Onscreen evaluation system for the Faculty of Engineering & Technology and Home Science
- Barcoded answers sheets with additional safety features
- Implementation of strict rules regarding evaluation and examination system to minimize the errors.
- Online declaration of examination results

#### 6.3.4 Research and Development:

- Organization of international conference on General Relativity by Mathematics Department in November, 2015. National academic conferences and seminars by other departments.
- Organization of workshop on Bioinformatics.
- Organization of Skill Development workshop by IQAC.
- Strengthening of research cell.
- Encouragement to faculty for more participation in International Conferences/seminars
- MoUs with different national agencies.
- Encouragement to faculty and students for publication in high impact factor journals.

#### 6.3.5 Library, ICT and physical infrastructure / instrumentation

- Establishment of H RD Guest house.
- Strengthening of library consortium.
- Initiation of construction and renovation of laboratories, class rooms and seminar halls.
- Construction of guest house for non teaching employees.
- Extension of valuation center.
- Extension of department of Physics, Chemistry, Geology and Physical Education.
- Completion of English department building.
- Strengthening of ICT facilities by providing more nodes and computers, Wi-Fi zones.
- Completion of construction of high capacity Water Tank in Campus for departments and administrative blocks.

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- Application for SAP phase II and
- Creation of instrumentation facility with financial aid from various major research projects and UGC/ University grant.

#### 6.3.6 Human Resource Management

- Establishment of online examination as well as evaluation system to minimize the man hours and human efforts
- Strengthening of Centralized Academic Services Unit of the University
- Procurement of software modules for various administrative sections of the University
- Earn and Learn Scheme extended to the students of affiliated colleges in the University campus
- Availing services of retired persons to counter the crunch of human resource

#### 6.3.7 Faculty and Staff recruitment

- The recruitment procedure for teaching and administrative staff has been initiated and advertisement has been published.
- Availing supportive services of visiting and guest faculty under various schemes.
- Career Advancement Scheme for teachers has been completed.

#### 6.3.8 Industry Interaction / Collaboration

- Industry institute interaction has been organized by Department of Biotechnology.
- Interaction with Swaminathan Foundation, Wardha to study the working of NGO.
- Interaction with DIC Amravati to study the schemes for entrepreneurs.
- Interaction with Centre of Science for Villages, Wardha to study sustainable technologies.
- Issue based participation from Industry in R & D work is explored in few cases by department of physics.
- Undertaking of research-industry consultation

#### 6.3.9 Admission of Students

- A well defined Centralized admission process with single window system.
- Intermittent counseling and guidance to the students to help them to make the suitable choice
- Centralized Admission process for departments like Chemical Technology/MBA/MCA/M. Ed by state government and online entrance test for admission to M.Sc. –Biotechnology.
- Admission Report Center (ARC) for admissions to technical courses and MBA.

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#### 6.4 Welfare schemes for

Teaching	<ul> <li>Loan facility for purchase of two and four wheeler vehicles</li> <li>Facility of advance for the purchase of Computers</li> <li>Leave Travel concession (LTC)</li> <li>Financial support for attending conference</li> <li>Medical bill reimbursement facility</li> <li>Cash advance facility for medical exigencies</li> <li>Group Insurance Scheme</li> <li>Teacher Welfare Fund</li> <li>Home loans</li> </ul>
Non teaching	<ul> <li>Grain and Festival advance</li> <li>Medical bill reimbursement facility</li> <li>Cash advance facility for medical exigencies</li> <li>Personal Loan facility from University Employees' Cooperative Society</li> <li>Leave Travel concession (LTC)</li> <li>Group Insurance Scheme</li> <li>Facility of advance for purchase of Computers</li> <li>Employee welfare fund</li> <li>Uniform facility to class IV employs</li> <li>Facility for cultural programme</li> <li>Home Loan</li> </ul>
Students	<ul> <li>Earn while Learn Scheme</li> <li>A token contribution by way of interest payment of the educational loans availed by EBC students under "Sant Gadge Baba Vidhyadhan Yojana"</li> <li>NET and Remedial Coaching classes for SC/ST/OBC and Minority</li> <li>Coaching for Competitive examinations.</li> <li>Basic medical facilities through health center.</li> <li>Life insurance facility with enhanced risk coverage</li> <li>Students Welfare Fund</li> <li>Free accommodation to the B.C. students in the university hostels</li> <li>Recommended Bus pass facilities for girl students from rural areas.</li> <li>Recommended Potable water for students in rural areas.</li> </ul>

6.5 Total corpus fund generated 50,05,036/6.6 Whether annual financial audit has been done Yes ✓ No

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

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Yes No ✓

Audit Type	Ex	ternat	Internal		
	Yes/No	Agency	Yes/No	Authority	
Academic	No	-	No	-	
Administrative	No	-	No	-	

6.8 Does the University	/ Autonomous College dec	lare resu	ılts witl	nin 30	days?	
	For UG Programmes	Yes		No	<b>✓</b>	

For PG Programmes

- 6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?
  - Introduction of Barcoded answer sheets
  - Establishment of three new sub CAP centres.
  - Introduction of online Redressal mechanism
  - On screen valuation system for faculty of engineering, Law and Home Science.
  - Digitisation of examination record
  - Adoption of student friendly, inclusive Examination Management System
  - Establishment of student support centre for examination purpose.
  - Started toll free number for examination related enquiries.
- 6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?
  - Organization of interactive meetings for promotion of autonomy in affiliated colleges
- 6.11 Activities and support from the Alumni Association
  - Interactive meet with students by alumni at respective departments
  - Organization of brain storming sessions about career opportunities and higher studies
  - Establishing networking of existing students by forming online groups
  - Donations of books.
  - Strengthening of carrier guidance bureau through alumni.
  - Suggestions of alumina for the revision and restructuring of curriculum as per the industrial need.

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#### 6.12 Activities and support from the Parent – Teacher Association

- Annual meetings with parents for monitoring progress of their wards
- Information sharing with parents through SMS/ Online.
- Feedback for the parents regarding development of curriculum/ placement opportunities/ infrastructure.

#### 6.13 Development programmes for support staff

- Deputation of administrative staff for training in administration, ICT, governance, HR management, legislation etc.
- Organization of skill development and competency building training programs
- Organization of cultural, sports and recreational programs

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

- Implementation of "Swaccha Bharat Swastha Bharat Abhiyan".
- Celebration of Ozone day.
- Inculcation of environmental awareness among teachers, students and administrative staff through cleanliness drive, shramadan and conservation of energy and water
- Regular plantation activity.
- Plantation of second row on road sides considering the age of first row plants.
- Organization of street play on Sustainable Technology
- Celebration of Environment Day and Wild life Week
- Green Chemical Technology/ Green Chemistry Projects
- Adoption of green preparations techniques instead of conventional synthesis.

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#### 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.
  - Preparation of Draft IT Policy for secured internet access on the campus
  - Digitization of examination records
  - Use of bar coded answer sheets
  - On screen valuation of answer sheets for faculties of Engineering, Home Science and Law
  - Establishment of three additional sub centres for CAP
  - Increase in the number of nodes and computers to increase efficiency of administrative services
  - Implementation of end to end programme for examination system in order to effective and efficient execution
- 7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Plan of Action	Action Taken
Automation and computerization of Examination and administration processes	Automation and computerization of Examination and administration processes has been implemented
Introduction of Vocational Courses	The B. Voc courses have been introduced in affiliated colleges.
Focused efforts for increasing number of funded research projects, patents and consultancies	Efforts have been made for increasing number of funded research projects, patents and consultancies in various departments.
Encouraging autonomy to the colleges	Efforts have been made to impart autonomy to the colleges
To raise the infrastructural facilities	The exiting infrastructural facilities have been increased. Extension of Physics, Chemistry, Geology departments and valuation section is completed.
Establish Centre of Excellence	Efforts have been made to establish Centre of Excellence in the university campus.
Strengthening the Digital India work	Efforts have been made to Strengthen the Digital India work

#### 7.3 Give two Best Practices of the institution

1) Title: **"Shetkari Prabodhan Karyshala"** under Dr. Panjabrao Deshmukh Arthvyvstha Niyaman Kendra

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2) 7	Γitle: Implementation of the recommendations in Energy Audit for Energy Conservation			
*Please	refer Annexure-III			
7.4 Cont	ribution to environmental awareness / protection			
•	Organization of street plays, poster / essay / debate competitions			
•	Periodic cleanliness drives			
•	Awareness programmes on proper e-waste management			
•	Promotion of Green Electronics			
•	Use of Five Star Energy compliant appliances to reduce electric power consumption			
•	Insistence to use LED lamps			
•	Organization of workshop for manufacturing of LED lamps			
•	Weekly Departmental Swachata Abhiyan activity			
•	Organization of world environmental day and Wild Life Week			
•	Increase in plantation in the campus			
•	Replacement of floral bouquets by saplings / books			
•	Organization of Workshop on "Regulation of Bio-diversity" jointly by Department of Botany			
	and State Biodiversity Board, Government of Maharashtra			
7.5 Whe	ther environmental audit was conducted? Yes Vo			

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

#### **Strengths:**

- Devoted faculty and administrative staff
- Supportive governance system
- Integrated Campus
- Advanced library facility
- Well established high speed network connectivity throughout the campus
- Single Window System for students facilities

#### Weaknesses:

- Underdeveloped industrial area
- Inadequate teaching and non-teaching staff
- Low GER

#### **Opportunities:**

- Upcoming textile and orange processing industries
- Smart City Project
- Skill development programmes
- International collaborations and linkages

**Threats:** 

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- Advent of foreign and private universities
- Declining interest in traditional and basic branches
- Unpredictable climatic conditions leading to socio-economic crisis leading to low GER

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

- i. Improvement of skills of teachers by organization of workshops, training programmes on econtent, soft skills development, etc.
- ii. Organization of computer literacy programmes for students
- iii. Organization of cultural programmes for students and staff
- iv. Organization of "Lokakala Mahotsav" for conservation and promotion of tribal culture
- v. Promotion for energy self sufficiency through use of solar system
- vi. Organization of skill development programmes for students
  - o Proficiency in English
  - o Communication Skills
  - o Personality Development
  - Skills at work places
  - Life coping skills
  - o ICT Skills
  - o Handling of the Laboratory equipments
- vii. Publication of University Bulletin to encourage academic, co-curricular and extra-curricular activities of students
- viii. Starting new post graduate departments for Commerce, Political Science, History and Economics
- ix. Skill based Certificate Courses hosted by Department of Lifelong Learning and Extension
- x. Establishment of Fitness Centre for Girls on the Campus
- xi. Implementation of Web-based Integrated University Management System
- xii. Establishment of Students Meditation Centre, Audio Visual Laboratory
- xiii. Establishment of LED/Solar workshop
- xiv. Establishment of Gender Championship
- xv. Establishment of Open/Green Gym for meditation and yoga

Dr. S. F. R. Khadri

Sant Gadge Baba

Signature of the Charge of the Cha

#### Annexure – I

# Sant Gadge Baba Amravati University, Amravati <u>Academic Calendar for University Departments</u> (Annual Pattern Programme) 2015-2016

Duration	Days	Holidays/ Sundays	Teaching Days	Distribution of work	Holidays 2010-2011
15 Jun - 30 Jun	16	2 S		Admission	
1 July - 15 July	15	2 S		Admission	
16 July - 31 July	16	2 S + 1 H	13	Teaching & Learning	18
1 Aug - 31 Aug	31	5 S + 2 H	24	Teaching & Learning	15, 18
1 Sept - 30 Sept	30	4 S + 1 H	25	Teaching & Learning	17
1 Oct - 31 Oct	31	4 S + 2 H	25	Teaching & Learning	12, 22
1 Nov – 7 Nov	07	1 S	06	Teaching & Learning	
Total (a)			93		
Vacations (Winter) 1 8 Nov - 15 Nov	08				
		T		1	<u> </u>
16 Nov - 28 Nov	13	1 S	11	Teaching & Learning	25
Vacations (Winter) 2 29 Nov -13 Dec	15				
		1			
14 Dec -31 Dec	18	2 S + 2 H	14	Teaching & Learning	24, 25
01 Jan – 31 Jan	31	5 S + 1 H	25	Teaching & Learning	26
1 Feb - 29 Feb	29	4 S + 1 H	24	Teaching & Learning	19
1 Mar - 31 Mar	31	4 S + 3 H	24	Teaching & Learning	07, 24, 25
1 Apr - 30 Apr	30	3 S + 4 H		Preparation & Examination	08, 14, 15, 19
1 May – 14 May	14	2 S + 1 H		Examination	1
Total (b)			98		
				1	
Vacations (Summer) 15 May - 12 Jun	29				
Total Teaching Days (a+b) 93+98=191					

Non instructional Days are planed on the departmental level.

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# Sant Gadge Baba Amravati University, Amravati <u>Academic Calendar for University Departments (Semester Pattern Programme)</u> <u>2015-2016</u>

Duration	Days	Holidays/ Sundays	Teaching Days	Distribution of work	Holidays 2010-2011
15 Jun - 30 Jun	16	2 S		Admission	
1 July - 15 July	15	2 S		Admission	
16 July - 31 July	16	2 S + H	13	Teaching & Learning	18
1 Aug - 31 Aug	31	5 S + 2 H	24	Teaching & Learning	15, 18
1 Sept - 30 Sept	30	4 S + H	25	Teaching & Learning	17
1 Oct - 31 Oct	31	4 S + 2 H	25	Teaching & Learning	12, 22
1 Nov – 7 Nov	07	S	06	Teaching & Learning	
Vacations (Winter) 1 8 Nov - 15 Nov	08				
16 Nov - 28 Nov	13	S		Preparation & Examination	25
Total (a)			93		
Vacations (Winter) 2 29 Nov -13 Dec	15				
14 Dec -31 Dec	18	2 S + 2 H		Preparation & Examination	24, 25
01 Jan – 31 Jan	31	5 S + H	25	Teaching & Learning	26
1 Feb - 29 Feb	29	4 S + H	24	Teaching & Learning	19
1 Mar - 31 Mar	31	4 S + 3 H	24	Teaching & Learning	07, 24, 25
1 Apr - 30 Apr	30	3 S + 4 H	23	Teaching & Learning	08, 14, 15, 19
1 May – 14 May	14	2 S + H		Preparation & Examination	
Total (b)			96		
Vacations (Summer) 15 May - 12 Jun	29				
Total Teachin	g Days (a-	⊦b)	93+96=189		

Non instructional Days are planed on the departmental level.

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#### Sant Gadge Baba Amravati University, Amravati

## <u>Academic Calendar for University Departments - Summary</u> (Annual Pattern Programme) **2015-2016**

Categorization	Number of weeks (Six Day a week pattern)
Teaching & Learning Process	31.8
Admissions/ Examinations	10
Vacation	7.4
Public Holidays	2.7
Total (Approx.)	52

# <u>Academic Calendar for University Departments - Summary</u> (Semester Pattern Programme) 2015-2016

Categorization	Number of weeks (Six Day a week pattern)		
	First Session	Second Session	Total
Teaching & Learning Process	15.5	16	31.5
Admissions/ Examinations	8.4	1.9	10.9
Vacation	3.3	4.1	7.4
Public Holidays	1	1.4	2.4
Total (Approx.)	28.2	23.4	52

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#### **Annexure-II**

#### **Analysis of Feedback from stakeholders**

- 1) Due care of suggestions and recommendations is being taken after receipt of the feedbacks from the students, alumni, parents and other stake holders.
- 2) Equal importance is given to the suggestions from Class-IV to Class-I employees.
- 3) The slow learners are benefitted normally by the feedback procedure.
- 4) The placement of the students can be increased by having the feedback from the students who are placed through campus placements.
- 5) As usual the feedbacks are placed before the competent bodies and authorities for incorporation of the suggestions and recommendations by the stake holders.
- 6) Feedback can help the students/ staff to address their grievances, if any.
- 7) In the light of feedback obtained, some curricula are designed to address the various aspects pertaining to academic, research and social values.

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#### **Annexure-III**

#### **Best Practices**

1) Title of the Practice: "Shetkari Prabodhan" under Dr. Panjabrao Deshmukh Arthvyvstha Niyaman Kendra

#### **Preamble:**

A number of government schemes are implemented by the government at various levels for rural community and farmers. Those helpful schemes are not utilised due to unawareness of the farmers and due to lack of proper guidance. Moreover the lack of procedural knowledge the schemes are not utilized upto full extent. University through its Chair, Dr. Panjabrao Deshmukh Arthvyvstha Niyaman Kendra tried to bridge between the government authorities and the farmers.

#### **Objectives of the Practice:**

University made an attempt to bring government schemes at the doorsteps of the stakeholders and this practice will be continued.

#### The Context:

A number of government schemes that are designed for the benefit of rural community and farmers do not reach to the ultimate beneficiaries due to lack of wide publicity, approachable nodes, documentation required, potential outcomes, initial seed money required, etc. University through Dr. Panjabrao Deshmukh Arthvyvstha Niyaman Kendra along with the government officials bridged the gap.

#### The Practice:

The workshops were jointly organized by the university and the government officials under the chairmanship of District Collector and other officials. Various officers from agriculture, irrigation, electricity board, bank officials, market committees, transport section were invited for the workshop. Such workshops were organized in rural areas of five districts. During the workshops the officers presented the government schemes before the community people and answered the queries of the villagers. Organizers also extended the helping hand to the farmers for the implementation of the schemes.

#### **Evidence of Success:**

Total five workshops were organized in five districts of university jurisdiction. A total of 3000 farmers attended the workshops and got their queries solved.

#### **Problems Encountered and Resources Required**

- To bring together the farmers for the workshops
- To coordinate between the government officials and the farmers
- To keep the track of progress of the implementation of different schemes at the farmers level.
- Network of NSS units of the respective districts was the Manpower used for the organization of these workshops.

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#### 2) Title of the Practice: "Environmental Protection through Management Practices"

#### **Preamble:**

The main purpose of the undertaking of the environmental audit was to understand the present scenario of the university campus in terms of the environmental assessment in terms of water supply and distribution, waste management, consumption of electricity, vehicle emission within the campus and suggest appropriate measures to improve the sustainability. This activity will be continued in the future.

#### **Objectives of the Practice:**

- To find sources of water supply and consumption also rainwater harvesting mechanism
- Sources of waste water and solid waste generation and its management
- Consumption of electricity and finding out high consumption zones and to suggest appropriate measures to control.
- To find out the vehicle emissions in terms of SOX, NOX gases, particulate matter, etc within the campus

#### The Context:

The university was established in 1983 and shifted to the present campus in 1986. Since then is in a continuous development spree with 23 teaching departments, administrative departments with a total of 74 buildings. The pace of development affected the environment and it became an ultimate necessity to have as assessment of the environment in terms of utilization of water, generation of waste water and other waste, consumption of electricity, vehicle emissions, etc. The study was undertaken to provide necessary remedies and solutions.

#### The Practice:

#### **Electricity consumption:**

The university has been receiving power supply from MSEDCL with an annual consumption of 1055755.55 KW of which 56% being used by academic buildings while 20% is consumed by administrative buildings. Rest of which is used by residential complex including street lights. The major percentage of the power consumption by street lights was through mercury vapour bulbs. This was suggested to be replaced by LED lamps and solar street lamps. Most of the buildings were using tube lights with library building with almost 1000 tube lights. The suggestion was made to replace this with CFL or LED lamps. Another major source of power consumption was with 3 star rated ACs. There was a suggestion to use energy efficient 5 star rated ACs to bring down the consumption.

#### **Solid waste management:**

There was almost 20% rise in solid waste generation and the university was lacking the infrastructure for handling and disposal of solid waste. Recommendation was made for every building to have separate units for waste collection for biodegradable and non biodegradable waste. The biodegradable waste can be converted into compost except laboratory and medical waste. The food waste generated by the hostels and guest house was approximately 3.1 ton per year. The measures has to be taken for reduction of food waste by exploring the characterization of waste, reasons why a particular portion of the food waste and accessing the proper storage and refrigeration. The food waste could be used for generation of compost or for generation of biogas using anaerobic digesters.

#### Water supply and waste water management:

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A total water supply to all the buildings o the campus was 145302.5 Kl per annum with 48% utilization in residential buildings while 32% and 20% utilized by administrative and academic buildings. From the utilization it was found that approximately 320000 l of waste water is generated in the campus per day. This waste water so generated can be recycled for gardening system as well as ground water recharge. Waste water treatment unit with trained manpower is recommended to be installed on campus. As well as rain water harvesting system is to be installed on all buildings.

#### **Emissions from vehicles:**

Number of 2, 3 and 4 wheelers entering the campus was almost very high during the peak hours contributing 70% of the 2 wheelers. The emissions were found to be very high during 11 am to 12.30 pm. The particulate matter emission was highest with about 83.016 kg per year, 4382.451 kg per year of CO and 2561.376kg of hydrocarbons per year and 1400.39 kg of nitrous oxide per annum. Considering the fact it was advised that there should be a centralised parking facility near the entry gate and not to allow 3 wheelers to travel within the campus.

#### LPG used by university:

The university almost uses about 21060 kg of LPG per annum. However there are no specific recommendations for reducing this use of LPG. Still the use of biogas is recommended for this particular purpose.

#### Garden and plantations:

There are 59117 trees on the campus with 22 gardens, a well developed nursery and group plantations area for various types of trees. The university has to maintain the high greenery cover on the campus by the maintenance of these gardens at the same time managing the wastage of water used for irrigations.

#### **Evidence of Success:**

#### **Electricity consumption:**

The university has started replacing the CFL/ tube lights with LED lamps. The mercury vapour lamps used as street lights are being replaced by solar lamps. The non functional solar lamps are being repaired. University has taken a decision to install all new ACs with 5 star ratings and inverter ACs thus saving 20% of electric consumption during season. The new buildings are designed in such a way that they will utilize maximum natural light available thus reducing the electric consumption. The new and old hostels are equipped with solar water heaters.

#### **Solid waste management:**

University has started to separately collect biodegradable and non biodegradable waste. The hazardous waste is collected by Municipal Corporation. The practice of burning of solid waste has been stopped in the university campus. The process of utilization and conversion of food waste into biogas has been implemented on pilot scale in university canteen. Finding the success of this pilot study university is in process for installation of anaerobic digesters at guest house and hostels.

#### Water supply and waste water management:

The university has rain water harvesting system as well as all the new buildings are equipped with rain water harvestings systems resulting in saving of about Rs. 2 lacs on water bills per annum. The waste water treatment plant is in pipeline. The capacity of the exiting water reservoirs is being increased to increase the ground water recharge. This has resulted in an increase in ground water levels in dug wells bore wells there by making the campus self sufficient in water resources thus avoiding the procurement of water through tankers. The university is under the construction process of an overhead tank of capacity of 4 lac litres.

#### **Emissions from vehicles:**

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The university has prohibited the entry of three wheelers and heavy vehicles beyond a fixed point in the campus. University has also implemented regulations for people coming for morning walk to park their vehicles at the main gate.

#### LPG used by university:

A pilot plant for biogas production from food waste has been successfully tested. In the next phase anaerobic digesters will be installed in canteen, guest house and hostels for on sight generation of biogas that could be utilized for cooking food.

#### **Garden and plantations:**

New gardens are under development in various departments. Considering the age of the plants on roadsides, a second row of plantations has been carried out. Further new zones of plantations are created.

The garden section has started using sprinklers, drip irrigation instead of using manual pipes wherever possible to control the unnecessary wasting of water. Green and pollution free campus is well maintained.

#### **Problems Encountered and Resources Required**

#### **Electricity consumption:**

The total replacement of existing tube lights, mercury vapour lamps and CFLs require a huge amount. Thus university has considered a phase wise replacement of the existing lighting system. The old non functional ACs are replaced in phase wise manner with the 5 star rated new ACs.

#### **Solid waste management:**

The non biodegradable waste requires land fillings or incineration and is in process with Municipal Corporation for disposal.

#### Water supply and waste water management:

The collection of waste water from buildings situated far away from each other is one of the major hurdles for waste water management.

#### **Emissions from vehicles:**

Considering the wide spread campus it is difficult to restrict the incoming of vehicles within the campus though the three wheelers like auto rickshaws are restricted from entering beyond a fix point.

#### LPG used by university:

Due to seasonal variations in temperatures the anaerobic digesters cannot work with maximum efficiency and considering the requirement of LPG it is not possible to completely replace LPG with biogas.

#### **Garden and plantations:**

Because of intense temperature during summers it becomes difficult to maintain the gardens.

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