

SANT GADGE BABA AMRAVATI UNIVERSITY GAZETTE



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PART- ONE

(Extra-Ordinary)
Saturday, the 31st August, 2019

Direction

No. 26 /2019

Date : 31/ 08/2019

Subject : Examination leading to the Degree of B.E. / B.Text. E. /B.Tech.(Chem.Engg.)/B.Tech.(Chem. Tech.) Polymer(Plastic) Tech. (Four Year Degree Course.... Semester Pattern) as per Credit Grade System in the Faculty of Science & Technology, Direction, 2019.

Whereas, the Schemes of teaching & examination of Semester I & II of B.E./B.Text./B.Tech.(Chem.Engg.)/B.Tech.(Chem. Tech.) Polymer(Plastic)Tech. Courses (Four Year degree Course ... Semester Pattern .. Credit Grade System) is in existence as per Direction No. 29/2010,

AND

Whereas, the Director, D.T.E. Mumbai vide its letter dated 16th April, 2018 and the Member Secretary, A.I.C.T.E. New Delhi vide its letter dated 8th June, 2018 has requested the University to adopt the A.I.C.T.E. Model Curriculum of U.G. & P.G. Courses in Engineering & Technology to be implemented,

AND

Whereas the Hon'ble Vice-Chancellor has constituted the Committee under the Chairmanship of Dean, Faculty of Science & Technology for the implementation of A.I.C.T.E. Model Curriculum,

AND

Whereas, the Committee in its meeting held on 09/07/2019 has recommended the Schemes of teaching & examination of Semester I & II (Group A & B) of B.E./B.Text.E./B.Tech.(Chem.Engg.)/B.Tech.(Chem. Tech.) Polymer(Plastic) Tech. Courses (Common to all branches) (Four Year degree Course ... Semester Pattern .. Credit Grade System) to be implemented from the academic session 2019-2020 and onwards,

AND

Whereas, the Hon'ble Vice-Chancellor has accepted & approved the recommendation of the above Committee on behalf of the Faculty of Science & Technology and Academic Council regarding implementation of Scheme of teaching & examinations of Semester I & II (Group A & B) of B.E./B.Text. E. /B.Tech.(Chem.Engg.)/B.Tech.(Chem. Tech.)Polymer(Plastic) Tech. Courses (common to all branches) as per A.I.C.T.E. Model curriculum under Sub Section (7) of Section 12 of M.P.U.Act, 2016 to be implemented from the academic session 2019-2020 and onwards,

AND

Whereas Ad-hoc Committees in the Faculty of Science & Technology i.e. Civil Engg., Mechanical Engg., Electrical Engg., Computer Science & Engg. and Humanities & App. Sciences, General Engg.in its meeting dated 11/8/2019 has prepared the draft syllabi and recommended the same to be implemented from the academic session 2019-2020 and onwards,

AND

Whereas, the Schemes of teaching & examinations of Semester I & II (Group A & B) of B.E./B.Text.E./B.Tech.(Chem.Engg.)/B.Tech.(Chem. Tech.) Polymer(Plastic) Tech. Courses are to be implemented from the academic session 2019-2020 and onwards,

AND

Whereas, the the Schemes of teaching & examinations and other provisions are required to be regulated by the Regulation and Ordinance,

AND

Whereas, matter of making Regulation and Ordinance is a time consuming process,

Now, therefore, I, Dr. M. G. Chandekar, Vice-Chancellor of Sant Gadge Baba Amravati University, in exercise of powers conferred upon me, under sub-section (8) of Section 12 of the Maharashtra Public Universities Act, 2016, having issued the following directions;

1. This Direction may be called, " Examination leading to the Degree of B.E. / B.Text. / B.Tech. (Chem.Engg.) / B.Tech. (Chem. Tech.) Polymer (Plastic) Tech. (Four Year Degree Course.... Semester Pattern) as per Credit Grade System in the Faculty of Science & Technology, Direction, 2019.
2. This Direction shall come into force with effect from the date of its issuance.

3. Subject to the conditions prescribed by the AICTE / Government from time to time, for admission to First Year B.E./B.Text.E. / B.Tech. (Chem. Engg.) / B.Tech. (Chem. Tech.) Polymer (Plastic) Tech. courses the candidate shall be considered eligible :

Passing 12th Standard Examination of the Maharashtra State Board of Secondary and Higher Secondary Education, with subjects :

1. English (Higher or Lower)
2. Modern Indian Language (Higher or Lower)
3. Mathematics and Statistics.
4. Chemistry.
5. Physics.
6. Any other optional subject from out of the list prescribed by the said Secondary and Higher Secondary Education Board.

OR

1. English (Higher or lower)
2. Mathematics and Statistics.
3. Chemistry
4. Physics
5. Vocational subject (Defined by the said Board as a Technical Subject)

OR

An Examination recognised by the Sant Gadge Baba Amravati University as an equivalent to the above.

4. Subject to the conditions prescribed by the AICTE/Govt.from time to time for direct admission to the second B.E. / B.Text.E. / B.Tech. (Chem. Engg.) / B.Tech. (Chem. Tech.) Polymer (Plastic) Tech. the candidates shall be considered eligible :-

Passing Diploma in relevant branch in First Division, awarded by the Board of Technical Examination of Maharashtra State, Mumbai.

OR

Any Diploma equivalent to the corresponding Diploma of the Board of Technical Examination of Maharashtra State, Mumbai.

5. a) The Degree of Bachelor of Engineering shall be awarded to examinee who in accordance with the provisions of this Direction qualifies for the award in any of the following branches.
- i. Civil Engineering
 - ii. Mechanical Engineering
 - iii. Electrical Engineering (Electronics & Power)
 - iv. Electronics and Telecommunication Engineering
 - v. Production Engineering
 - vi. Computer Science & Engineering
 - vii. Instrumentation Engineering
 - viii. Information Technology
 - ix. Computer Engineering,
 - x. Bio-Medical Engineering, &
 - xi. Electrical and Electronics Engineering.
- b) The Degree of Bachelor of Textile Engineering shall be awarded to examinee, who qualifies in accordance with the provisions of this Direction.
- c) The Degree of Bachelor of Technology (Chemical Engineering) shall be awarded to examinee who qualifies in accordance with the provisions of this Direction.
- d) The Degree of Bachelor of Technology (Chemical Technology) Polymer (Plastic) Tech. shall be awarded to examinee who qualifies in accordance with the provisions of this Direction .
6. (i) There shall be eight semester examinations leading to the Degree of B.E./B.Text.E./B.Tech. (Chem. Engg.) /B.Tech. (Chem. Tech.) Polymer (Plastic) Tech. (First, Second, Third, Fourth, Fifth, Sixth, Seventh & Eight Semester)
- (ii) The first & Second Semester Examinations shall be common for all the branches.
- (iii) The procedure for bifurcation of the students in Group - A & Group - B shall be as given in Appendix ó B.
7. The period of Academic Session shall be such as may be notified by the University.
8. The main examination of first, third, fifth and seventh semester shall be held by the University in winter & supplementary examination in summer every year. And main examination of second, fourth, sixth & eighth semester shall be held in summer & the supplementary examination in winter every year.

9. The Internal Assessment marks for theory should be based on Class Test and Attendance as follows :-
a) Class Test - 15
Marks will be based upon two Class Tests.

b) Attendance	-	Mark/s
75% to 80%	-	1
81% to 85%	-	2
86% to 90%	-	3
91% to 95%	-	4
96% to 100%	-	5

Whereever if internal assessment marks are ≥ 10 then it should be converted out of 20.

10. Subject to his/her compliance with the provisions of this Direction & other Ordinances pertaining to Examination in force from time to time, the applicant for admission, at the end of the course of study of a particular semester/session, to an Examination specified in column (1) of the table I below, shall be eligible to appear if,

- i) he/she satisfies with the conditions in the table and the provisions thereunder.
- ii) he/she complies with the provisions of the ordinance pertaining to the Examination in general from time to time.
- iii) he/she has prosecuted a regular course of study in a college affiliated to the University.
- iv) he/she has in the opinion of the Principal shown satisfactory progress in his/her studies.

TABLE I

Name of Exam B.E./B.Text.E./ B.Tech. (Chem. Engg.)/B.Tech. (Chem.Tech.) Polymer (Plastic)Tech.	The student should have passed Exam. of	The Student should have satisfactorily completed the following semester	The student should have passed the following examination
1.	2.	3.	4.
First Semester Group A/Group B	XII standard Examination or equivalent	.....	.....
Second Semester Group A/Group B	.....	I Semester Group A/Group B	.....
Third Semester	.....	II Semester Group A/Group B	2/3rd heads of I & II Sem. combined together
Fourth Semester	.....	III Semester	.....
Fifth Semester	I & II Sem.	IV Semester	2/3rd heads of III & IV Sem. combined together
Sixth Semester	.....	V Semester	.....
Seventh Semester	III & IV Sem.	VI Semester	2/3rd heads of V & VI Sem. combined together
Eighth Semester	.....	VII Semester	.....

11. An examinee who has passed 2/3 rd heads of passing shall be allowed to keep term in the next higher class.
Explanation :

- i) While calculating 2/3 rd heads of passing, fraction if any shall be ignored
- ii) For considering the heads of passing, every theory and every practical shall be considered as separate head of passing

11. The schemes of teaching & examinations shall be as provided under Appendix-A appended with this Direction.

13. The fees for each B.E./B.Text.E./B.Tech. (Chem. Engg.)/B.Tech. (Chem. Tech.) Polymer (Plastic) Tech. Examinations (Theory & Practical) shall be as prescribed by University from time to time.

14. The computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) of an examinee shall be done as given below :-

The marks will be given in all examinations which will include college assessment marks and the total marks for each Theory / Practical shall be converted into Grades as per Table II.

SGPA shall be calculated based on Grade Points corresponding to Grade as given in Table II and the Credits allotted to respective Theory / Practical shown in the scheme for respective semester.

SGPA shall be computed for every semester and CGPA shall be computed only in VIII semester. The CGPA of VIII semester shall be calculated based on SGPA of VII and SGPA of VIII semester as per following computation :-

$$SGPA = \frac{C_1 \times G_1 + C_2 \times G_2 + \dots + C_n \times G_n}{C_1 + C_2 + \dots + C_n}$$

Where C_1 = Credit of individual Theory / Practical

G_1 = Corresponding Grade Point obtained in the respective Theory / Practical

$$CGPA = \frac{(SGPA)_{VII} \times (Cr)_{VII} + (SGPA)_{VIII} \times (Cr)_{VIII}}{(Cr)_{VII} + (Cr)_{VIII}}$$

Where $(SGPA)_{VII}$ = SGPA of VII Semester

$(Cr)_{VII}$ = Total Credits for VII Semester

$(SGPA)_{VIII}$ = SGPA of VIII Semester

$(Cr)_{VIII}$ = Total Credits for VIII Semester

CGPA equal to 6.00 and above shall be considered as equivalent to First Class which shall be mentioned on Grade Card of VIII Semester as a foot note.

**TABLE II
THEORY**

Grade	Percentage of Marks	Grade Points
AA	80 ÷ Marks ÷ 100	10
AB	70 ÷ Marks < 80	9
BB	60 ÷ Marks < 70	8
BC	55 ÷ Marks < 60	7
CC	50 ÷ Marks < 55	6
CD	45 ÷ Marks < 50	5
DD	40 ÷ Marks < 45	4
FF	00 ÷ Marks < 40	0
ZZ	Absent in Examination	0

PRACTICAL

Grade	Percentage of Marks	Grade Points
AA	85 ÷ Marks ÷ 100	10
AB	80 ÷ Marks < 85	9
BB	75 ÷ Marks < 80	8
BC	70 ÷ Marks < 75	7
CC	65 ÷ Marks < 70	6
CD	60 ÷ Marks < 65	5
DD	50 ÷ Marks < 60	4
FF	00 ÷ Marks < 50	0
ZZ	Absent in Examination	0

15. (i) The scope of the subjects shall be as indicated in the syllabi.
(ii) The medium of instruction and examination shall be English.
16. As per A.I.C.T.E. Model Curriculum, an Induction Programme of three (3) weeks duration is mandatory to the students at the start of the first year.
17. The Provisions of Ordinance No. 18 of 2001 in respect of an Ordinance to provide grace marks for passing in a Head of passing and improvement of division (Higher Class) and getting distinction in the subject and condonation of deficiency of marks in a subject in all the Faculties prescribed by the Direction No. 15 of 2017 shall be applicable to each examination under this Direction.
18. An examinee who does not pass; or who fails to present himself/herself for the examination shall be eligible for readmission to the same examination/semester, on payment of fresh fees and such other fees as may be prescribed from time to time.
19. A candidate who could not complete a semester satisfactorily or who has failed will be eligible for readmission to the same semester.
However readmission to semester should be allowed only when a regular session is running for the particular semester.

20. One who has passed the Final B.E./B.Text.E./B.Tech. (Chem. Engg.)/B.Tech. (Chem. Tech.) Polymer (Plastic) Tech. examination of the University in one branch and who desires to take B.E./B.Text.E./B.Tech. (Chem. Engg.)/B.Tech. (Chem. Tech.) Polymer (Plastic) Tech. Degree in another branch, shall be admitted to the Third semester of that branch and shall be governed by this Direction for all other purposes.
21. After examinations the Board of Examination & Evaluation shall publish the result of the examinees as early as possible and the branchwise merit list shall be notified as per Ordinance No.6.
22. Notwithstanding any thing to the contrary in this Direction, no one shall be admitted to any examination under this Direction, if he/she has already passed the said examinations or an equivalent examinations of any statutory University.
23. (i) The examinees who have passed in all the subjects prescribed for all the examinations of the particular branch shall be eligible for award of the Degree of Bachelor of Engineering / Bachelor of Technology (Chemical Technology) Polymer (Plastic) in the branch concerned, Bachelor of Textile Engineering and Bachelor of Technology (Chemical Engineering).
(ii) The Degree certificate in the prescribed form, shall be signed by the Vice-Chancellor.
24. The existing Direction No. 29/2010 shall stand repealed stagewise and only applicable to the students who have already sought their admissions as per its provisions and shall stand repealed after exhausting the chances given to the failure students of Old Course by the Univesity.

Date : 31 /08/2019

Sd/-
(Dr. M.G.Chandekar)
Vice-Chancellor

Four Year Degree Course in Bachelor of Engineering Branch : B.E./B.Tech./B.Text. E.(Common to all the Branches)
Semester Pattern (Choice Based Credit system)

Appendix-A

Semester :FIRST/ SECOND GROUP A																	
			TEACHING SCHEME						EXAMINATION SCHEME								
			HOURS / WEEK			Total HOURS/WEEK	CREDITS		THEORY					PRACTICAL			
Sr. No.	Subject Code	Subject	Lecture	Tutorial	P/D				DURATION OF PAPER (Hr.)	MAX. MARKS THEORY PAPER	MAX. MARKS COLLEGE ASSEMENT	TOTAL	MIN. PASSING MARKS	MAX. MARKS		TOTAL	MIN. PASSING MARKS
														EXTERNAL	INTERNAL		
THEORY																	
01	1 A 1	Engineering Mathematics I	3	1	—	4	4		3	80	20	100	40	—	—	—	—
02	1 A 2	Engineering Physics	4	—	—	4	4		3	80	20	100	40	—	—	—	—
03	1 A 3	Engineering Mechanics	3	1	—	4	4		3	80	20	100	40	—	—	—	—
04	1 A 4	Computer Programming	3	—	—	3	3		3	80	20	100	40	—	—	—	—
PRACTICALS																	
05	1 A 5	Workshop Practice	—	—	4	4	2		—	—	—	—	—	25	25	50	25
06	1 A 6	Engineering Physics Laboratory	—	—	2	2	1		—	—	—	—	—	25	25	50	25
07	1 A 7	Engineering Mechanics Laboratory	—	—	2	2	1		—	—	—	—	—	25	25	50	25
08	1 A 8	Computer Programming Laboratory	—	—	2	2	1		—	—	—	—	—	25	25	50	25
		TOTAL	13	2	10	25	20					400				200	
	Note- An Induction Program of Three Weeks duration to be offered to the students at the start of First Year.														TOTAL	600	
Semester :FIRST/ SECOND GROUP B																	
THEORY																	
01	1 B 1	Engineering Mathematics II	3	1	—	4	4		3	80	20	100	40	—	—	—	—
02	1 B 2	Engineering Chemistry	4	—	—	4	4		3	80	20	100	40	—	—	—	—
03	1 B 3	Basic Electrical Engineering	3	1	—	4	4		3	80	20	100	40	—	—	—	—
04	1 B 4	Engineering Graphics	3	—	—	3	3		3	80	20	100	40	—	—	—	—
PRACTICALS																	
05	1 B 5	English Communication Skills Laboratory	—	—	4	4	2		—	—	—	—	—	25	25	50	25
06	1 B 6	Engineering Chemistry Laboratory	—	—	2	2	1		—	—	—	—	—	25	25	50	25
07	1 B 7	Basic Electrical Engineering Laboratory	—	—	2	2	1		—	—	—	—	—	25	25	50	25
08	1 B 8	Engineering Graphics Laboratory	—	—	2	2	1		—	—	—	—	—	25	25	50	25
		TOTAL	13	2	10	25	20					400				200	
															TOTAL	600	

Note- An Induction Program of Three Weeks duration to be offered to the students at the start of First Year.

Appendix – B

The procedure for bifurcation of the students in Group – A and Group-B of First Year Scheme for B.E. / B.Text.E. / B.Tech. (Chem. Engg.) / B.Tech. (Chem. Tech.) Polymer (Plastic) Tech.

- 1) The sanctioned intake and / or the number of candidates admitted to first year Engineering shall be divided into two groups as A and B in multiples of 60 preferably at the institute level.
- 2) Group-A candidates shall register for Group-A subjects in first semester and Group-B candidates shall register for Group-B subjects in first semester.
- 3) The candidates shall be examined for their subjects from the respective groups in first semester.
- 4) In the Second semester, candidates from Group-B shall register for subject of Group-A. Similarly, candidates from Group-A shall register for subjects of Group-B.
- 5) The candidates shall be examined for their subjects from the other groups in second semester.
- 6) Thus, at the end of the first year, all the subjects shall be studied by the candidates from both the groups.
- 7) The mark list shall show only the group obtained in respective Semester, like First Semester Group- B, First Semester Group-A.
- 8) The exercise on the part of the college shall be to ensure that the candidates fill up the examination forms correctly according to the subjects group they have registered in both the semesters.
