

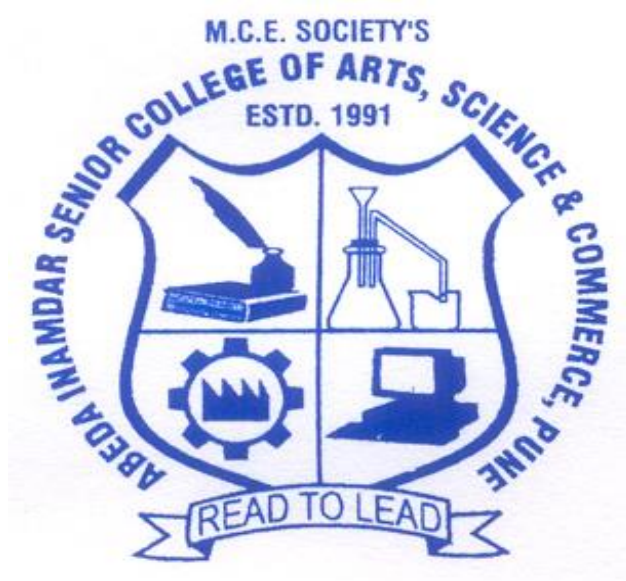
B. Sc. PROGRAM STRUCTURE

FACULTY OF SCIENCE

For Choice-Based Credit System (CBCS) Under Autonomy

(Semester Pattern)

Bachelor of Science (B.Sc.) Program (**2021 Pattern**)



M.C.E. Society's
ABEDA INAMDAR SENIOR COLLEGE OF ARTS, SCIENCE
AND COMMERCE (AUTONOMOUS), PUNE

With effect from June 2021

M.C.E. Society's
ABEDA INAMDAR SENIOR COLLEGE OF ARTS, SCIENCE
AND COMMERCE (AUTONOMOUS), PUNE
AZAM CAMPUS, CAMP, PUNE – 411001

For the Award of

Bachelor of Science (B.Sc.)

Applicable for the Autonomous College affiliated to

Savitribai Phule Pune University

B.Sc. Degree Course (Choice Based Credit System)

(2021 Pattern)

With effect from June 2021

B. Sc. PROGRAM STRUCTURE

FACULTY OF SCIENCE

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1) **INTRODUCTION:** The B.Sc. Degree Course (2021 pattern) will be introduced in the following order:

- a. **First Year B.Sc. 2021-2022**
- b. **Second Year B.Sc. 2022-2023**
- c. **Third Year B.Sc. 2023-2024**

B.Sc. Degree Course will consist of six semesters divided into three Years. The first year (Semester I and II), Second Year (Semester III and IV) and Third Year (Semester V and VI). The Choice Based Credit System will be followed and examination will be held at the end of each semester.

2) **PROGRAM OBJECTIVES:**

- a) To empower students to take up the responsibilities in various functional areas in an organisation.
- b) To impart experiential learning to provide practical exposure on the subjects.
- c) To develop business skills among students that satisfies the requirements of business and industry.
- d) To develop social and ethical values for good business practices and employability through entrepreneurial skills.
- e) To prepare students to pursue higher education and build their professional qualification.

3) **ELIGIBILITY:**

a) Higher Secondary School Certificate (10+2) or its equivalent Examination with English with any three science subjects such as Physics, Chemistry, Biology, Mathematics, Geography, Geology, etc.

OR

b) Three Years Diploma Course of Board of Technical Education conducted by Government of Maharashtra or its equivalent.

OR

c) Three Years Diploma in Pharmacy Course of Board of Technical Education conducted by Government of Maharashtra or its equivalent.

OR

d) Intermediate Science Examination with Compulsory English, Physics, Chemistry, Biology/Mathematics or any other three subjects from the Board of Secondary Education M.P. Bhopal, as a regular candidate.

e) The students who have completed three years Semi English Krishi Tantra Niketan of Mahatma Phule Krishi Vidyapeeth, Rahuri are eligible, however such cases should be approved by equivalence committee of science faculty.

f) Higher Secondary School Certificate (10+2) Examination with English and any of the following vocational subjects of + 2 level (MCVC).

4) **SUBJECT COMBINATION:**

a) The candidate will select a group of subjects containing combination of four subjects of science discipline in the first year as per the college prospectus.

- b) In the Second Year one subject will be dropped for a Compulsory Language, Health and Nutrition and Environmental Science Course as per the college prospectus.
- c) In the final year of B.Sc., the student will choose one subject as Subject of Specialization from his subject combination of S.Y.B.Sc. as offered by the college.
- d) If a student selects Vocational Biotechnology in First Year, he/she has to continue with this subject till the third year and would be awarded a B.Sc. Vocational Degree.

5) COURSES CARRYING PRACTICALS:

- a) F.Y.B.Sc.: Four Practical Courses of 1.5 Credit in each Semester in all four subjects.
- b) S.Y.B.Sc.: Three Practical Courses of 2 Credit in each Semester in three subjects.
- c) T.Y.B.Sc.: Three Practical Courses of 2 Credit in each Semester in the subject of specialization.

6) MEDIUM OF INSTRUCTION:

The medium of instruction for B.Sc. Degree course shall be English except for languages other than English.

7) SCHEME OF CREDITS (Academic/CGPA):

Sr. No.	Sem No.	No. of Courses		Lecture per Course (50 Minute)		Credit per Course		Compulsory Ability Enhancement /Skill Enhancement Credit Course	Total Credits (a*e)+(b*f)+g
		a	b	c	d	e	f		
		T	P	T	P	T	P	T	
1	I	8	4	36	54	2	1.5	0	22
2	II	8	4	36	54	2	1.5	0	22
3	III	6	3	36	72	2	2	2+2	22
4	IV	6	3	36	72	2	2	2+2	22
5	V	6*	3*	36	72	2	2	2+2	22
6	VI	6*	3*	36	72	2	2	2+2	22
									132

- a) Each Theory credit is equivalent to 15 Clock Hours and Each Practical Credit is equivalent to 30 Clock Hours of teaching in a Semester.
- b) There is 15 weeks of teacher-student interaction in each semester
- c) The workload will be calculated on the basis of 12 weeks teaching only and 3 weeks for continuous assessment including preparation time to students during the semester.
- d) * Students opting for Vocational Biotechnology will have 2 Theory and 1 Practical Course in Third Year in lieu of Two Discipline Specific Theory Courses and One Discipline Specific

Practical Course.

Table 2: Compulsory Ability Enhancement (CGPA) Course (2021 Pattern)

Sr. No.	Compulsory Add on Course (Ability Enhancement Credit Course)	Class	Semester	Credit
	Language English 21SBENGL23 Marathi 21SBMRTH23 Arabic 21SBARAB23	S.Y.B.Sc.	III	2
2	Health and Nutrition 21SBHENT23	S.Y.B.Sc.	III	2
3	Language English 21SBENGL24 Marathi 21SBMRTH24 Arabic 21SBARAB24	S.Y.B.Sc.	IV	2
4	Environmental Science 21SBAEEV24	S.Y.B.Sc.	IV	2

8) COURSEWISE CLASSIFICATION OF CGPA/ACADEMIC CREDITS:

Table 3: Total credits for three years B.Sc. Course (2021 Pattern)

Sr. No.	Nature of Courses	Semesters (Credits)						Total (Credits)
		I	II	III	IV	V	VI	
1	Discipline Specific Core Course (DSCC) Theory	16	16	12	12	-	-	56
2	Discipline Specific Core Course (DSCC) Practical	6	6	6	6	-	-	24
3	Ability Enhancement Compulsory Courses (AEC)	-	-	4	4	-	-	08
4	Discipline Specific Elective Course (DSEC) Theory	-	-	-	-	12	12	24
5	Discipline Specific Elective Course (DSEC) Practical	-	-	-	-	6	6	12
6	Skill Enhancement Course (SEC)	-	-	-	-	4	4	08
		22	22	22	22	22	22	132

9) SCHEME OF CREDITS (NON-CGPA):

- In addition to the compulsory credits of 132, the student has to earn additional 08 credits from the following groups by actively participating / completing respective activities.
- These extra credits will not be considered for CGPA calculation; however, these are mandatory for the completion and award of B.Sc. Degree.
- Courses in Group 1 and Group 2 are compulsory (02 Credits each).
- The student has to earn the remaining 04 Credits through participation in the various activities from Group 3 to Group 11
- The student can earn a maximum of 04 credits from each group: Group 3 to Group 10.

f) A student is encouraged to earn a maximum of 04 credits in a year.

Table 4: Description of Groups and Activities for Mandatory Non-CGPA Credits

Group	Activity	Credits
1	Physical Education Note: Group 1 is compulsory for all the students as stated above	02
2	Democracy, Elections and Good Governance Note: Group 2 is compulsory for all the students as stated above	02
3	Sports Representation: At College Level State/ University/ National Level International Level	01 02 03
4	NSS/ NCC Related NSS/ NCC – Participation in Annual Camp NCC (Awarded B or C certificate) NSS/ NCC RD Parade participation	01 02 04
5	Avishkar Participation College level University level/State level Winner at state level Participation in Extension Activity of College Participation in Cultural Activity of College	01 02 04 01 01
6	Research paper presentation State/National level International level	01 02
7	Participation in Summer School (Minimum 30 Hours) or Short term course (Minimum 30 Hours)	Maximum 03
8	Scientific survey /societal survey	02
9	Field visit/ study tour/ Industrial visit/ participation in curricular competition/ co-curricular competition	01
10	Online Certificate course/ MOOCs (minimum 15 hours per credit) or Internship (60 hrs),	Maximum 04 credits
11	Interdisciplinary Course Offered by the college (2 Credit for 30 Contact Hours)	02

10) SCHEME OF NO. OF COURSES:

Table 5: Semester-Wise Number of CGPA Courses for Three Year B.Sc. Program (2021 Pattern)

Sr. No.	Nature of Courses	Semesters (No. of Papers)						Total
		I	II	III	IV	V	VI	
1	Discipline Specific Core Course Theory	8	8	6	6	-	-	28
2	Discipline Specific Core Course Practical	4	4	3	3	-	-	14
3	Discipline Specific Elective Courses (DSEC) Theory	-	-	-	-	6	6	12
4	Discipline Specific Elective Courses (DSEC) Practical	-	-	-	-	3	3	6
5	Ability Enhancement Compulsory Course (Env. Sc., Health & Nutrition and Language)	-	-	2	2	-	-	4
6	Discipline Specific Skill Enhancement Course (Theory/Practical/Project)	-	-	-	-	2	2	4
Sub Total		12	12	11	11	11	11	68

11) DURATION:

- a) The program shall be a full-time program and the duration of the program shall be for three years. If a student fails to complete the Program in three years, two more years will be given to complete the program. i.e. the program's maximum time for completion shall be: Duration of Program (3 years) plus additional two 2 years.
- b) If a student fails to complete the Program within the period of 5 years, his/her registration to the Program stands cancelled and the student loses all the credits earned.
- c) In case if the student intends to pursue the program, he/she will have to seek admission from the First Year again.

12) ATTENDANCE:

No candidate shall be allowed to appear for the semester end examinations (External Examination) unless he/she has not less than 75% of attendance in each semester.

13) COLLEGE TERMS:

The dates for the commencement and conclusion of the first and the second terms shall be as defined by the College. Only duly admitted students can keep the terms. The present relevant ordinances pertaining to grant of terms will be applicable.

14) METHODS OF EVALUATION AND PASSING CRITERIA:

Table 6: Structure of Examination Mark Scheme of CBCS for B.Sc. Program (2021 Pattern)

Sem	Course opted	Course Name	Credit	CIE	End Semester	Total Max Marks	
I	DSC-1	Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
	DSC-1 Practical	Practical	1.5	20	30	50	
	DSC-2	Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
	DSC-2 Practical	Practical	1.5	20	30	50	
	DSC-3	Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
	DSC-3 Practical	Practical	1.5	20	30	50	
	DSC-4	Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
	DSC-4 Practical	Practical	1.5	20	30	50	
				22	240	360	600
	II	DSC-5	Paper 1:	2	20	30	50
Paper 2:			2	20	30	50	
DSC-5 Practical		Practical	1.5	20	30	50	
DSC-6		Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
DSC-6 Practical		Practical	1.5	20	30	50	
DSC-7		Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
DSC-7 Practical		Practical	1.5	20	30	50	
DSC-8		Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
DSC-8 Practical		Practical	1.5	20	30	50	
			22	240	360	600	
First Year Total			44	480	720	1200	
III	DSC-9	Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
	DSC-9 Practical	Practical	2	20	30	50	
	DSC-10	Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
	DSC-10 Practical	Practical	2	20	30	50	
	DSC-11	Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	
	DSC-11 Practical	Practical	2	20	30	50	
	AECC- A1	Health and Nutrition	2	20	30	50	
AECC- B1	Language	2	20	30	50		
			22	220	330	550	
IV	DSC-12	Paper 1:	2	20	30	50	
		Paper 2:	2	20	30	50	

	DSC-12 Practical	Practical	2	20	30	50
	DSC-13	Paper 1:	2	20	30	50
		Paper 2:	2	20	30	50
	DSC-13 Practical	Practical	2	20	30	50
	DSC-14	Paper 1:	2	20	30	50
		Paper 2:	2	20	30	50
	DSC-14 Practical	Practical	2	20	30	50
	AECC- A2	Environmental Science 2	2	20	30	50
	AECC- B2	Language-2	2	20	30	50
Second Year Total			22	220	330	550
			44	440	660	1100
V	DSC-15	Paper:	2	20	30	50
	DSC-16	Paper:	2	20	30	50
	DSC-17	Paper:	2	20	30	50
	DSC-18	Paper:	2	20	30	50
	DSC-19	Paper:	2	20	30	50
	DSC-20	Paper:	2	20	30	50
	DSC-21 Practical	Practical	2	20	30	50
	DSC-22 Practical	Practical	2	20	30	50
	DSC-23 Practical	Practical	2	20	30	50
	SEC-1	Paper:	2	20	30	50
	SEC-2	Paper:	2	20	30	50
			22	220	330	550
VI	DSC-24	Paper:	2	20	30	50
	DSC-25	Paper:	2	20	30	50
	DSC-26	Paper:	2	20	30	50
	DSC-27	Paper:	2	20	30	50
	DSC-28	Paper:	2	20	30	50
	DSC-29	Paper:	2	20	30	50
	DSC-30 Practical	Practical	2	20	30	50
	DSC-31 Practical	Practical	2	20	30	50
	DSC-32 Practical	Practical	2	20	30	50
	SEC-3	Paper:	2	20	30	50
	SEC-4	Paper:	2	20	30	50
			22	220	330	550
Third Year Total			44	440	660	1100
Total			132			3400

DSC: Discipline Specific Core Course

AECC: Ability Enhancement Compulsory Course

SEC: Skill Enhancement Course

The evaluation of students will be done on three parameters:

- Continuous Internal Evaluation (CIE) of Theory and Practical
- Semester End Theory Examination (Final)
- Semester End Practical Examination (Final)

For Continuous Internal Evaluation (CIE), Evaluation will be done continuously. Internal assessment will be of **20** marks for a paper of 50 Marks. These 20 marks are divided as follows:

Sr. No.	Component of CIE for Theory	Marks (To be converted into)
a	Online MCQ Test of 20 Marks	05
b	Two Assessments of 10 Marks Each *	05
c	Participation in any 02 activities at Department / College Level	05
d	Compulsory Mid Sem Exam of 20 Marks	05
Sr.	Component of CIE for Practical	Marks
a	Mock Practical Examination, Journal, Viva Voce	20

Subject teacher needs to adopt any one of the following methods for assessment under category b.

Table 7: *Methods of Assessment for Category b

Written Exam	Quiz
Presentations	Projects
Assignments	Tutorials
Oral examination	Open Book Test and Others

In case of students failing to score under category (a to c), the attendance can be considered to give marks.

15) DURATION OF END SEMESTER EXAMINATION (FINAL):

Question papers will be set for Thirty Marks (One and Half Hour Duration) for Theory and Thirty Marks (Three and Half Hour) for Practical Examination.

Table 8: Criteria for Paper Setting of Internal Assessment and End Semester Examination

Knowledge	Understanding	Applications, Analysis, Problem Solving	Total Marks
50%	25%	25%	100%

16) STANDARD OF PASSING:

- A student must obtain a minimum of 40% marks in Continuous Internal Evaluation (CIE), and minimum 40% marks in Practical Examination and End Semester Examination.
- Passing separately in Internal Assessment, Practical Examination and End Semester Examination is compulsory.
- Students who are failed in Continuous Internal Evaluation (CIE) in a semester can reappear for

the same in the next semester.

17) A.T.K.T. RULES:

- a) If a candidate fails in all the courses (subject heads) of Semester I, shall be allowed to proceed to semester II. The candidate has to earn minimum 26 credits (60% of total CGPA credits) in First Year to progress to Second Year.
- b) Minimum number of credits required to take admission to third year of B.Sc. 44 credits of CGPA Courses (100% Credits) of F.Y.B.Sc. and at least 22 Credits from CGPA Course from S.Y.B.Sc.

18) VERIFICATION AND REVALUATION:

- a) The candidate may apply for verification and revaluation of result through Principal of the College which will be done by the college as per ordinances framed in this behalf.
- b) Verification or Revaluation will be done only for Semester End Examination and not for CIE and Practical Courses.

19) STRUCTURE OF TRANSCRIPT:

Conversion of percentage into credit(s) and grade(s): The following illustrations could be taken as an example for computing SGPA and CGPA from percentage to credits for degree program courses in science subjects.

Table 9: Grades Points and Grade

Sr. No.	Numerical Grade	Grade Letter
1)	9.5 or more than 9.5	O (Outstanding)
2)	8.25 or more but less than 9.50	A+ (Excellent)
3)	6.75 or more but less than 8.25	A (Very Good)
4)	5.75 or more but less than 6.75	B+ (Good)
5)	5.25 or more but less than 5.75	B (Above Average)
6)	4.75 or more but less than 5.25	C (Average)
7)	4.00 or more but less than 4.75	D (Pass)
8)	Less than 4.00	F (Fail)
9)	Absent	Ab (Absent)

Table 10: Conversion of Marks into GP and GL

Sr. No.	Grade Letter	Grade Point	Marks
1.	O (Outstanding)	10	$90 \leq \text{Marks} \leq 100$
2.	A+ (Excellent)	9	$75 \leq \text{Marks} \leq 89$
3.	A (Very Good)	8	$60 \leq \text{Marks} \leq 74$
4.	B+ (Good)	7	$55 \leq \text{Marks} \leq 59$
5.	B (Above Average)	6	$50 \leq \text{Marks} \leq 54$
6.	C (Average)	5	$45 \leq \text{Marks} \leq 49$
7.	D (Pass)	4	$40 \leq \text{Marks} \leq 44$
8.	F (Fail)	0 to 3	$40 \leq \text{Marks}$
9.	Ab (Absent)	-	

PERCENTAGE CALCULATION OF A GIVEN CGPA**Table 11: Conversion of CGPA into Corresponding Percentage**

CGPA	Grade	Equation	Percentage
10	O	$20 \times 10 - 100$	100
9.75	O	$20 \times 9.75 - 100$	95
9.5	O	$20 \times 9.5 - 100$	90
9.0	A+	$12 \times 9 - 24$	84
8.25	A+	$12 \times 8.25 - 24$	75
8.0	A	$10 \times 8 - 7.5$	72.5
7.0	A	$10 \times 7 - 7.5$	62.5
6.75	A	$10 \times 6.75 - 7.5$	60
6.25	B+	$5 \times 6.25 + 26.25$	57.5
5.75	B+	$5 \times 5.75 + 26.25$	55
5.5	B	$10 \times 5.5 - 2.5$	52.5
5.25	B	$10 \times 5.25 - 2.5$	50
4.75	C	$10 \times 4.75 - 2.5$	45
4.00	C	$6.6 \times 4.0 + 13.6$	40

- a) A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.
- b) For non-credit courses ‘Satisfactory’ or ‘Unsatisfactory’ shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

20) STRUCTURE OF CGPA AND MARK SCHEME OF CHOICE BASED CREDIT SYSTEM

Table 12: Method of Calculation of Credit Points in First Year

Sem	Course Opted	Theory/ Practical	Credit (a)	Internal Marks(b)	External Marks (c)	Total Marks(d)	Grade Letter (e)	Grade Point (f)	Credit Point (a*f)
I	DSC-1	Theory	2	20	30	50	O	10	20
		Theory	2	20	30	50	A+	9	18
		Practical	1.5	20	30	50	A	8	12
	DSC-1	Theory	2	20	30	50	B+	7	14
		Theory	2	20	30	50	B	6	12
		Practical	1.5	20	30	50	C	5	7.5
	DSC-3	Theory	2	20	30	50	D	4	8
		Theory	2	20	30	50	A	8	16
		Practical	1.5	20	30	50	D	4	6
	DSC-4	Theory	2	20	30	50	O	10	20
		Theory	2	20	30	50	A+	9	18
		Practical	1.5	20	30	50	A	8	12
Total			22	240	360	600		88	163.5
SGPA Calculation			$\frac{\text{Total Credit Points}}{\text{Total Credits}} = \frac{163.5}{22} = 7.43$						
Sem	Course Opted	Theory/ Practical	Credit (a)	Internal Marks(b)	External Marks (c)	Total Marks(d)	Grade Letter(e)	Grade Point (f)	Credit Point (a*f)
II	DSC-5	Theory	2	20	30	50	O	10	20
		Theory	2	20	30	50	A+	9	18
		Practical	1.5	20	30	50	A	8	12
	DSC-6	Theory	2	20	30	50	B+	7	14
		Theory	2	20	30	50	B	6	12
		Practical	1.5	20	30	50	C	5	7.5
	DSC-7	Theory	2	20	30	50	D	4	8
		Theory	2	20	30	50	C	5	10
		Practical	1.5	20	30	50	B	6	9
	DSC-8	Theory	2	20	30	50	O	10	20
		Theory	2	20	30	50	A+	9	18
		Practical	1.5	20	30	50	A	8	12
Total			22	240	360	600		87	160.5
SGPA Calculation			$\frac{\text{Total Credit Points}}{\text{Total Credits}} = \frac{160.5}{22} = 7.29$						
First Year Total			44	480	720	1200			7.36

Table 13: Method of Calculation of Credit Points in Second Year

Sem	Course Opted	Theory/ Practical	Credit (a)	Internal Marks(b)	External Marks(c)	Total Marks(d)	Grade Letter(e)	Grade Point (f)	Credit Point (axf)
III	DSC-9	Theory	2	20	30	50	O	10	20
		Theory	2	20	30	50	A+	9	18
		Practical	2	20	30	50	A	8	16
	DSC-10	Theory	2	20	30	50	B+	7	14
		Theory	2	20	30	50	B	6	12
		Practical	2	20	30	50	C	5	10
	DSC-11	Theory	2	20	30	50	D	4	8
		Theory	2	20	30	50	A	8	16
		Practical	2	20	30	50	D	4	6
	AECC- A1	Theory	2	20	30	50	O	10	20
AECC- B1	Theory	2	20	30	50	A+	9	18	
Total			22	220	330	550		80	158
SGPA Calculation			$\frac{\text{Total Credit Points}}{\text{Total Credits}} = \frac{158}{22} = 7.18$						
Sem	Course Opted	Theory/ Practical	Credit (a)	Internal Marks (b)	External Marks (c)	Total Marks (d)	Grade Letter(e)	Grade Point (f)	Credit Point (axf)
IV	DSC-12	Theory	2	20	30	50	O	10	20
		Theory	2	20	30	50	A+	9	18
		Practical	2	20	30	50	A	8	16
	DSC-13	Theory	2	20	30	50	B+	7	14
		Theory	2	20	30	50	B	6	12
		Practical	2	20	30	50	A	8	16
	DSC-14	Theory	2	20	30	50	D	4	8
		Theory	2	20	30	50	B	6	12
		Practical	2	20	30	50	A	8	16
	AECC- A2	Theory	2	20	30	50	O	10	20
AECC- B2	Theory	2	20	30	50	A+	9	18	
Total			22	220	330	550		85	170
SGPA Calculation			$\frac{\text{Total Credit Points}}{\text{Total Credits}} = \frac{166}{22} = 7.72$						
Second Year Total			44	440	660	1100			7.45

Table 14: Method of Calculation of Credit Points in Final Year

Sem	Course Opted	Theory/ Practical	Credit (a)	Internal Marks (b)	External Marks (c)	Total Marks (d)	Grade Letter(e)	Grade Point (f)	Credit Point (axf)	
V	DSEC-15	Theory	2	20	30	50	O	10	20	
	DSEC-16	Theory	2	20	30	50	A+	9	18	
	DSEC-17	Theory	2	20	30	50	A	8	16	
	DSEC-18	Theory	2	20	30	50	B+	7	14	
	DSEC-19	Theory	2	20	30	50	A	8	16	
	DSEC-20	Theory	2	20	30	50	B	6	12	
	DSEC-21	Practical	2	20	30	50	O	10	20	
	DSEC-22	Practical	2	20	30	50	A+	9	18	
	DSEC-23	Practical	2	20	30	50	A	8	16	
	SEC-1	Theory/ Practical/ Project	2	20	30	50	B+	7	14	
	SEC-2	Theory/ Practical/ Project	2	20	30	50	B+	7	14	
	Total			22	220	330	550		87	178
	SGPA Calculation			$\frac{\text{Total Credit Points}}{\text{Total Credits}} = \frac{178}{22} = 8.09$						
Sem	Course Opted	Theory/ Practical	Credit (a)	Internal Marks (b)	External Marks (c)	Total Marks (d)	Grade Letter(e)	Grade Point (f)	Credit Point (axf)	
VI	DSC-24	Theory	2	20	30	50	O	10	20	
	DSC-25	Theory	2	20	30	50	A+	9	18	
	DSC-26	Theory	2	20	30	50	A	8	16	
	DSC-27	Theory	2	20	30	50	B+	7	14	
	DSC-28	Theory	2	20	30	50	A	8	16	
	DSC-29	Theory	2	20	30	50	B	6	12	
	DSC-30	Practical	2	20	30	50	O	10	20	
	DSC-31	Practical	2	20	30	50	A+	9	18	
	DSC-32	Practical	2	20	30	50	A	8	16	
	SEC-3	Theory/ Practical/ Project	2	20	30	50	B+	7	14	
	SEC-4	Theory/ Practical/ Project	2	20	30	50	B+	7	14	
	Total			22	220	330	550		87	178
	SGPA Calculation			$\frac{\text{Total Credit Points}}{\text{Total Credits}} = \frac{178}{22} = 8.09$						
Third Year Total			44	440	660	1100			8.09	
$\text{CGPA} = \frac{\text{Total Credit Points of 3 Years}}{\text{Total Credits of 3 Years}} = \frac{1008}{132} = 7.63$										

21) COMPLETION OF DEGREE:

- a) The students who earn 140 Credits (132 CGPA and 08 Non-CGPA), shall be considered to have completed the requirements of B.Sc. ‘
- b) Program with Specialization in a particular subject and CGPA shall be calculated for such successful students.

22) PERFORMANCE INDICES:

- a) The performance of every student in each semester will be indicated by a number up-to two decimal places.
- b) This number will be called as Semester Grade Point Average (SGPA).
- c) The Semester End Marksheet will be declared at the end of each semester and it will contain grade for all the courses of that semester along with course codes and titles and SGPA.

The SGPA will be calculated as follows:

$$SGPA = \frac{\sum_{i=1}^p C_i G_i}{\sum_{i=1}^p C_i}$$

$$SGPA = \frac{\sum \text{Grade Points Earned} \times \text{Credits for Each Course}}{\text{Total Credits}}$$

The Final grade sheet and transcript will contain SGPA as well as Cumulative Grade Point Average (CGPA). CGPA is the weighted average of all the course (Theory/Practical/Project) of first to six semesters.

23) GRADE IMPROVEMENT

- a) A Candidate will be allowed to re-appear for the examination for improvement of Class or grade within a period of 2 years from the date of his/her passing Bachelor Degree examination. Only 1 attempt for improvement will be allowed, according to the syllabus in existence.
- b) A Candidate shall have to reappear for minimum 1/3rd and /or maximum all the courses at a time on which the class is awarded. However, reattempted paper can not be chosen by the candidate for the purpose of class improvement.
- c) A Candidate who has appeared for improvement of class and fails to improve his/her class, his/her performance at such reappearance shall be ignored.
- d) A Candidate appearing for the improvement of Class grade shall not be entitled to be in the list of Rank holders/ Merit.
- e) Improved Candidate will have to surrender the degree, Statement of marks, passing certificate in original, after the declaration of their results of the concerned improved class. After surrendering the above documents in original, new certificate will be issued in due course of time as in usual process.

Definition of Key Concepts

Academic Year: The duration of two consecutive (one odd and one even) semesters constitutes one academic year.

Choice Based Credit System (CBCS): The CBCS provides choice for students to select from the prescribed courses (core courses, discipline specific electives, generic elective, ability enhancement compulsory courses, skill enhancement courses, mandatory non-CGPA courses etc.).

Program: An educational program leading to award of a degree.

Course: Usually referred to, as 'paper' is a component of a program. Each course should define learning objectives and learning outcomes. A course may be designed to comprise lectures, field work, outreach activities, project work, vocational training, viva, seminars, term papers, assignments, presentations, self-study etc. or a combination of some of these.

Credit(C): A unit by which the course work is measured. It determines the number of hours of teaching/ instruction required per week.

To earn 1 credit minimum 15 hours of teaching/ instruction is required.

A 3 credits theory course requires a minimum duration of 45 hours of teaching in a semester (15hrs*3= 45 hours).

A 2 credits theory course requires a minimum duration of 30 hours of teaching in a semester

A 1 credits practical course requires a minimum duration of 15 hours of practical work in a semester.

Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters O, A+, A, B+, B, C, P and F. The Letter Grades, Grade Points and scale of UGC are adopted. Grading is done using Letter Grades as qualitative measure of achievement in each Course like: O (Outstanding), A+ (Excellent), A (Very Good), B+ (Good), B (Above Average), C (Average), P (Pass), F (Fail) and Ab (Absent), based on the percentage (%) of marks scored in (CIE+SEE) of the Course and conversion to Grade.

Grade Point (GP): It is a numerical weight allotted to each letter grade on a 10-point UGC scale viz. O=10, A+=09, A=08, B+=07, B=06, C=05, P=04, F=00 & Ab=00.

Credit Point (CP): The numerical value obtained by multiplying the grade point (GP) by the no. of credit(C) of the respective course i.e. $CP = GP \times C$.

Cumulative Grade Point Average (CGPA): It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.

Semester Grade Point Average (SGPA): It is a measure of performance of work done in a semester. It is ratio of total credit points (CPs) secured by a student in various courses registered in

a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.

Semester: Each semester shall consist of 15-18 weeks of academic work equivalent to 90/100 actual teaching days. The odd semester may be scheduled from June to December and even semester from January to May.

Transcript: Based on the grades earned, a transcript shall be issued to all the registered students after every semester. The transcript shall display the course details (code, title, no. of credits, grades secured) along with SGPA of that semester and CGPA earned till that semester at the end of each academic year. The students shall be issued transcript for each semester and a consolidated transcript indicating the performance in all the semesters at the completion of the program.

Absolute Grading: Under the absolute grading, the marks are converted to grades based on pre-determined class intervals.

Continuous Internal Evaluation (CIE) and Semester End Examinations (SEE) are two key assessment methods. For all theory courses/papers, the ratio of CIE & SEE is 40:60. Thus a course of 100 Marks shall have 40 CIE + 60 SEE which includes 20 marks for Practical Courses.

Program Span (PS): The program's maximum time for completion shall be: Duration of Program (3 Years) plus additional two 2 years.