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 दुरध्वनी (ईपीएबीएक्स) २६०९००० (अभ्यास मंडळे विभाग- २६०९०९४)
 फॅक्स : ००९१-०२३१-२६९१५३३ व २६९२३३३.e-mail:bos@unishivaji.ac.in

Ref./SU/BOS/Science/4749

Date:- 01/06/2018

The Principal
 All Affiliated Science (B.Sc.) Colleges,
 Shivaji University,
 Kolhapur.

Subject: Regarding Guidelines, Rules, Regulation, Structure and Standard of Passing of B.Sc. Part –I, II, III (Sem I & VI) Choice Based Credit System (CBCS) under the Faculty of Science and Technology.

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that University authorities have accepted and granted approval to Guidelines, Rules, Regulation, Structure and Standard of Passing of B.Sc. Part- I , II, III (Sem. I & VI) Choice Based Credit System (CBCS) under the Faculty of Science and Technology.

This Guidelines, Rules, Regulation, Structure and Standard of Passing shall be implemented from academic year 2018-2019 (i.e. from June 2018 onwards). A soft copy containing Guidelines, Rules, Regulation, Structure and Standard of Passing is attached herewith and it is also available on university website www.unishivaji.ac.in. (Online Syllabus)

You are therefore, requested to bring this to the notice of all Students and Teachers concerned.

Thanking you,

Yours faithfully,

Dy. Registrar

Encl: As above

Copy to;

- 1 Dean, Faculty of Science and Technology
 - 2 Chairman, BOS & Ad-hoc Bords under Faculty of Science and Technology
 - 3 Appointment Section
 - 4 P.G. Admission Section
 - 5 B.Sc. Section
 - 6 Affiliation Section (U.G.)
 - 7 Computer Centre
 - 8 Eligibility Section
 - 9 Distan Education
- } for information and necessary action.



Shivaji University, Kolhapur

Choice Based Credit System (CBCS)

Bachelor of Science (B. Sc.) Program

Under Faculty of Science & Technology

(To be implemented from Academic Year 2018-19)

Shivaji University, Kolhapur
Choice Based Credit System (CBCS)
Bachelor of Science (B. Sc.) Program
Under the Faculty of Science & Technology
Regulations and Guidelines

(To be implemented from Academic Year 2018-19)

1. **Implementation of Regulations & Guidelines:** The Regulations & guidelines shall be implemented gradually as mentioned below –
 - a) B.Sc. Part – I from Academic year 2018- 19
 - b) B.Sc. Part – II from Academic year 2019- 20
 - c) B.Sc. Part – III from Academic year 2020- 21
2. **Eligibility Criteria:** As per Ordinance – O. B. Sc. 1
3. **Duration and Pattern of program:** The total duration of B. Sc. Program will be of 3 years. The pattern of CBCS will be of semester type. There shall be 6 semesters each of 6 months duration.
4. **Weightage:** There shall be 2800 marks for 3 years B. Sc. CBCS Program with 140 Credits.
 - a) **B.Sc. Part – I (Sem I & II) :**
 For B. Sc. Part I total Credits shall be 52 with 26 Credits for each Semester, of these; there shall be 18 Credits for theory and 8 credits for practical per semester.
 - I. There shall be Ability Enhancement Compulsory Course (subject) (hereafter termed as AECC) with Paper A for Sem I and Paper B for Sem II each of 50 marks, as compulsory English course.
 - II. There shall be 4 Discipline Specific Core Courses (subjects) (hereafter termed as DSC) per semester.
 - III. There shall be 2 theory papers each of 50 marks for each DSC.
 - IV. There shall be 1 practical of 50 marks for each DSC.

b) B.Sc. Part –II (Sem III & IV) :

For B. Sc. Part II total Credits shall be 52 with 28 Credits for Sem III and 24 Credits for Sem IV. For Sem III there shall be 16 Credits for

theory and 12 credits for practical and for Sem IV there shall be 12 credits for theory and 12 credits for practical.

- I. There shall be One AECC with Paper C (Theory – 70 marks) and Paper D (Project – 30 marks) as compulsory Environmental Studies course. The examination shall be conducted at the end of Sem IV. The Credits of the Environmental Studies course shall be assigned at the end of Sem IV.
- II. There shall be 3 DSC (subjects) per semester.
- III. There shall be 2 theory papers each of 50 marks for a DSC.
- IV. There shall be 1 practical of 100 marks for each DSC.

c) **B.Sc. Part –III (Sem V & VI):**

For B. Sc. Part III total Credits shall be 36 with 18 Credits for each Semester of these; there shall be 10 Credits for theory and 8 credits for practical per semester.

- I. There shall be Ability Enhancement Compulsory Course (AECC) with paper E for Sem V and paper F for Sem VI, each of 50 marks [40(Theory) + 10(Internal)] as compulsory English course.
- II. There shall be 4 theory papers each of 50 marks [40 (Theory) +10 (Internal)] as Discipline Specific Elective (DSE).
- III. There shall be 4 practical of each of 50 marks.

5. Credit distribution chart for B. Sc. Program with Course Code :

Course Name	Total Courses(Papers)	Total Credits	% in total course
DSC : Discipline Specific Core Course	28	96	67
AECC : Ability Enhancement Compulsory Courses	6	12	14
DSE : Discipline Specific Elective	8	32	19
TOTAL	42	140	100

6. Ordinances regarding the examination – O. B.Sc. 2, 3 and 4 shall prevail.

7. Practical Examinations – There shall be the annual system of examination in respect of practical examinations for B.Sc. program. The rules for practical examinations shall be as per the letter / circular issued by respective Board of Studies time to time.

8. Equivalence of papers and chances for the students in previous – semester pattern – Two additional chances in subsequent semesters shall be provided for the repeater students of B.Sc. After this the concerned students will have to appear for the examination as per this revised scheme.

9. Standard of passing

a) For B.Sc. – I (Sem I & II)

Except English there shall be combined passing for two theory papers of 50 marks each for each course (subject) i.e. minimum 35 marks out of 100 are required for passing. There shall be separate passing for theory and practical courses. Minimum 18 marks out of 50 are required for passing of practical examination of each course. For English theory exam, minimum 18 marks out of 50 are required for passing. There shall be a Compulsory Civic Course (CCC) entitled “Democracy, Elections and Good Governance” for Sem I and one Skill Development Course (SDC) for Sem II. (CBCS R. B. Sc. 3)

b) For B. Sc. – II (Sem III & IV)

Except Environmental Studies, there shall be combined passing for two theory papers of 50 marks each for each course i.e. minimum 35 marks out of 100 are required for passing. There shall be separate passing for theory and practical courses. Minimum 35 marks out of 100 required for passing of practical examination of each course. For Environmental Studies theory paper minimum 25 out of 70 and for project minimum 10 marks out of 30 are required for passing. There shall be separate passing for theory and project examination for Environmental Studies.

c) For B. Sc. – III (Sem V & VI)

There shall be separate passing for four theory papers of 50 marks each. Minimum 18 marks out of 50 are required for passing. For practical examination minimum 70 marks out of 200 are required for passing. There shall be separate passing for theory and practical

examinations. For English, minimum 18 marks out of 50 are required for passing.

- d) For the candidate/ student in Sem- V it is compulsory to appear for the paper entitled, “Constitution of India & Local Self Government”. For Sem VI one Skill Development Course (SDC) (CBCS R. B. Sc. 3). The study material of the syllabus for above stated paper will be available on www.unishivaji.ac.in

The subject stated above has to be learnt under self-study mode. The examination will have maximum 50 marks and nature of examination will be of multiple choice types. Minimum 20 marks (40%) out of 50 are required for passing.

The examination of above subject has to be conducted locally in the college. The certificate of the successful candidates/ students has to be issued by the Principal of the college. The mark list of passed candidates to be communicated to examination department of Shivaji University, Kolhapur within due time.

The student / candidate who failed to score minimum marks (20 marks) in the said paper will disqualified to claim the degree certificate.

10. Gradation Chart :

Marks Obtained	Numerical Grade (Grade Point)	CGPA	Letter Grade
Absent	0 (zero)	-	-
0 – 34	0 (zero)	0.0 – 4.99	F (Fail)
35 – 44	5	5.00 – 5.49	C
45 – 54	6	5.50 – 6.49	B
55 – 64	7	6.50 – 7.49	B+
65 – 74	8	7.50 – 8.49	A
75 – 84	9	8.50 – 9.49	A+
85 – 100	10	9.50 – 10.0	O (Outstanding)

Note:

- Marks obtained ≥ 0.5 shall be rounded off to next higher digit.
- The SGPA & CGPA shall be rounded off to 2 decimal points.
- Marks obtained in 50 marks or 200 marks paper shall be converted to 100 marks.

Calculation of SGPA & CGPA

1. Semester Grade Point Average (**SGPA**)

$$\text{SGPA} = \frac{\sum(\text{Course credits} \times \text{Grade points obtained}) \text{ of a semester}}{\sum(\text{Course credits}) \text{ of respective semester}}$$

2. Cumulative Grade Point Average (**CGPA**)

$$\text{CGPA} = \frac{\sum(\text{Total credits of a semester} \times \text{SGPA of respective semester}) \text{ of all semesters}}{\sum(\text{Total course credits}) \text{ of all semesters}}$$

11. Result - The result of each semester shall be declared as Pass or Fail. However, ATKT rules will be followed for theory and practical passing.

12. For Geography, Home Science and I.D.S. subject under the Faculty of Humanities, B.A. rules shall be applicable.

13. Revised Rules - These revised rules will be gradually implemented with effect from the academic year 2018 -19 for B.Sc. Part I, 2019-20 for B. Sc. Part II and 2020-21 for B. Sc. Part III. However, the existing (i.e. pre-revised) rules shall remain in force for the students of semester pattern during the transition period.

Choice Based Credit System (CBCS) pattern

**Under Faculty of Science & Technology
Implemented from the academic year 2018-19**

Sr. No.	Rules and Regulations
CBCS R. B. Sc. 1	The 3 year B. Sc. CBCS Program shall consist of 3 parts (Part I, II and III) consisting of 2 semesters each. Semester Examination for theory papers shall be held at the end of each semester. The Practical Examination shall be held at the end of Part I/ II/ III examination.
CBCS R. B. Sc. 2	<p>The Scheme of the Physical Education has been made operative for B. Sc. Part-I.</p> <p>The benefit of marks, obtained by the students in Physical Education Tests (of 10 marks) conducted by the University authorities shall be as under :</p> <ol style="list-style-type: none"> 1. If a student fails in up to four heads of passing of University examination (Theory / Practical) and having passed in all the remaining heads of passing, the marks obtained by him in the Physical Education Test shall be added to maximum up to four heads of passing in which he has failed as the case may be. A student getting the benefit of Physical Education marks should not be given advantage of any other Ordinance. The Physical Education Marks shall not be considered for the award of Class and for deciding merit. 2. If as a result of addition of Physical Education marks a student does not pass the examination the marks obtained by him in Physical Education shall not be considered. 3. The marks of Physical Education obtained by the unsuccessful students at the B. Sc. Part-I semester Examination shall be carried forward for their subsequent attempt/s. 4. The marks obtained in Physical Education shall not be considered for earning exemption in a subject of head of passing, but the marks will be carried forward for availing the benefit at the subsequent attempts. 5. The marks secured by the students under the Physical Education scheme shall be added to the total of his marks in the Examination irrespective of the fact of his passing or failure in the examination. The Physical Education marks shall be shown as “Total +P. E. Marks”. 6. The Physical Education Test shall be conducted in the Second Semester.
CBCS R. B. Sc. 3	<p>(A) Structure of Programme : Following shall be the Structure and course list</p> <p>(i) Structure - I for B. Sc. Part – I</p>

(ii) Structure - II for B. Sc. Part – II

(iii) Structure - III for B. Sc. Part – III

(B) List of courses

(i) for B. Sc. Part – I

(ii) for B. Sc. Part – II

(iii) for B. Sc. Part – III

(C) List of IDS courses:

Sr. No.	IDS	Compulsory	Optional
1.	Bio-Chemistry	Chemistry	Botany / Zoology
2.	Geo-Chemistry	Geology	Chemistry
3.	Astro-Physics	Physics	Mathematics
4.	Fisheries	Zoology	Botany/Chemistry
5.	Plant Protection	Botany	Chemistry/ Zoology
6.	Pollution	Chemistry	Botany/Zoology/ Physics

(D) Non-Credit courses:

(a) Compulsory Civic Courses (CCC)

For Sem I and Sem V there shall be Compulsory Civic Courses under **self study mode** which are as follows:

Sem I: CCC – I : Democracy, Elections and Good Governance

Sem V: CCC – II : Constitution of India and Local Self Government

(b) Skill Development Courses (SDC)

For Sem II and Sem VI there shall be Compulsory Skill Development Courses under **self study mode** which are as follows:

Sem II: SDC – I : Any one from following (i) to (v) (Non-Credit)

i) Business Communication & Presentation ii) Event management iii) Personality Development, iv) Yoga & Physical Management v) Resume, Report & proposal writing

Sem VI: SDC – II: Any one from following (vi) to (x) (Non-Credit)

	<p>vi) Interview & Personal Presentation Skill, vii) Entrepreneurship Development Skill, viii) Travel & Tourism, ix) E-Banking & Financial Services, x) RTI & Human Right Education (HRE), IPR & Patents</p> <ul style="list-style-type: none"> • <i>These courses are of Self Study mode. The study material of all above courses will be made available on University website.</i> • <i>The Examination of each of the course will be of 50 marks having 25 MCQ questions. Minimum 20 marks (40%) out of 50 are required for passing.</i> • <i>The duration of examination shall be 60 minutes.</i> • <i>The examination shall be conducted at the college level.</i> • <i>The list of all candidates along with marks is to be submitted to the University.</i> • <i>The degree will be awarded only after successful completion of these courses.</i> • <i>The performance of students regarding Non-Credit courses (CCC & SDC) shall be separately mentioned in Result-sheet as Pass or fail.</i>
<p>CBCS R. B. Sc. 4</p>	<p>The detailed syllabi for the various courses under CBCS pattern shall be subject to such revision, modification etc. as may be made by the Academic Council from time to time on the recommendation of the Boards of Studies in different subjects and shall be available on University website. The text-books and reference books for the various subjects shall be those as prescribed by the Academic Council from time to time on the recommendations of the respective Boards of Studies.</p>
<p>CBCS R. B. Sc. 5</p>	<p>(A)</p> <p>i. The result of the B. Sc. Part-I examination shall be declared publicly in three categories viz. i) Pass-candidates who have passed the Part-I examination and (ii) Fail-Candidates who have failed in one or more heads of passing. (iii) Fail-ATKT – Who have Failed in maximum four heads of passing, such candidates are allowed to proceed for B. Sc. Part II.</p> <p>ii. The result of the B. Sc. Part-II examination shall be declared publicly in three categories viz. i) Pass-candidates who have passed the Part-II examination and (ii) Fail-Candidates who have failed in one or more heads of passing. (iii) Fail-ATKT – Who have Failed in maximum four heads of passing, such candidates are allowed to proceed for B. Sc. Part III.</p>

	<p>iii. The result of B. Sc. Part III shall be declared publicly in two categories viz.</p> <p>(i) Pass-Candidates who have passed in all heads of passing of the Examination and (ii) Fail-Candidates who have failed in one or more heads of passing (iii) The result of the Candidate at B. Sc. Part –III shall be declared pass only when candidate clears the Part – I & II Examinations satisfactorily.</p> <p>No class shall be awarded at B. Sc. Part-I & II Examination and no passing certificate shall be issued to the candidates for these examinations.</p> <p>(B) The Results of the Examination will be declared on the basis of marks obtained, Grade points obtained, Credit points, Status, Percentage of marks, Result, SGPA & CGPA with numerical grade point and letter grade. The list of Courses, course code, Paper number of programme, numerical grade & letter grade table and calculation of SGPA and CGPA table shall be mentioned on the backside of mark-sheet.</p>
CBCS R. B. Sc. 6	The fees for the admission to the B. Sc. Part-I, B. Sc. Part-II & Part-III Semester Examinations shall be as prescribed by University Circular from time to time.
CBCS R. B. Sc. 7	The Principal of the college may permit a student to change his optional subject/ subjects in the first term only before submission of dully filled University Examination form.
CBCS R. B. Sc. 8	The Principal of the college has to certify the attendance and the examination form of the candidates as per the Ordinance O. 31 and O. 37. A candidate has to submit examination form as per the schedule and dates prescribed by the University for every examination to the University along with the prescribed fee through the Principal of the college.
CBCS R. B. Sc. 9	A candidate who has already passed in a principal course (subject) and wants to improve the performance in theory only, shall be allowed to appear again in that head in immediate subsequent semester after cancellation of earlier performance. This provision is made only for B. Sc. Part III (Sem V & VI) in the same course (subject) before taking concerned degree.
CBCS R. B. Sc. 10	a) A candidate, who has already qualified the B. Sc. Degree examination with a specific subject of this University and desires to seek B. Sc. Degree in another subject, shall be permitted to do so. Such candidate may appear again at B. Sc. Part – III (Sem V & VI) Examination on the submission of a new application for fresh admission and on payment of required fees. Such a candidate need not appear for compulsory course (English).

	<p>b) A candidate seeking degree in a specific course (subject) not offered at B. Sc. Part II & III, but offered only at B. Sc. Part I, needs to reappear for B. Sc. Part II (Sem III & IV) & Part III (V & VI), including both theory and practical.</p> <p>Such a candidate passing the examination shall not be eligible for class or additional degree. He shall be granted a certificate of having passed the additional subject.</p> <p>c) The Candidate who has already taken degree in any of the optional courses and if a candidate wants to change the principal courses, candidate can appear for new course as principle course (Subjects), from amongst the optional subjects of B. Sc. Part II, candidate can complete his new course, however the candidate will not be offered new degree in the principle subject, the degree will be offered if candidate surrenders his first degree.</p> <p>d) The above candidates, described in clause (c & d), shall get new degree, provided they surrender first degree. <i>This rule shall be applicable retrospectively.</i></p> <p>e) The Candidate who has already taken degree in any of the optional courses shall not be eligible for a second degree and a class, a prize, scholarship, medal or any other award even though candidate completes the degree in other remaining courses. The candidate will get all these benefits if candidate surrenders his first degree.</p>
CBCS R. B. Sc. 11	A candidate, who has duly qualified for appearing at B. Sc. Part III examination and has not taken the examination, will be permitted to offer any of his optional subjects at B. Sc. Part II, as his principal subject at B. Sc. Part III. However, the candidate has to complete two terms successfully in the newly selected course (subject).
CBCS R. B. Sc. 12	A candidate who has satisfactorily kept first term of B. Sc. Part-I in Shivaji University or any other Universities recognized by UGC and following CBCS pattern shall be allowed to join for the Second Term of the B. Sc. Part-I in Shivaji University.
CBCS R. B. Sc. 13	A candidate satisfactorily completing B. Sc. Part I (Sem I & II) from other UGC recognised Universities, following CBCS pattern and seeking admission for B. Sc. Part II of Shivaji University shall be admitted in affiliated colleges and Credits shall be transferred.
CBCS R. B. Sc. 14	<p>A candidate from other Universities recognized by UGC can take admission to the same course (Subject) in any subsequent semester in the framework of Rules and Regulations of this University.</p> <p>Such candidate who has obtained the concession of A. T. K. T. at any of the</p>

	<p>examinations of the other Universities recognized by UGC and desires to migrate to this University to proceed for further studies will have to clear the failed subjects from the parent University. In the case of such candidates the parent University should issue the Migration Certificate.</p>
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CBCS R. B. Sc. 3: (A) (i) Structure of B. Sc. Programme Sem I & II
Structure – I

SEMESTER – I (Duration – 6 Months)														
Sr. No.	Course (Subject) Title	TEACHING SCHEME						EXAMINATION SCHEME						
		THEORY			PRACTICAL			THEORY				PRACTICAL		
		Credits	No. of lectures	Hours	Credits	No. of lectures	Hours	Hours	Max	Total Marks	Min	Hours	Max	Min
1	DSC-A	2	5	4	2	4	3.2	2	50	100	35	PRACTICAL EXAMINATION IS ANNUAL		
2	DSC-A	2						2	50					
3	DSC-A	2	5	4	2	4	3.2	2	50	100	35			
4	DSC-A	2						2	50					
5	DSC-A	2	5	4	2	4	3.2	2	50	100	35			
6	DSC-A	2						2	50					
7	DSC-A	2	5	4	2	4	3.2	2	50	100	35			
8	DSC-A	2						2	50					
9	AECC-A	2	4	3.2	-----	-----	-----	2	50	50	18			
Total		18	24	19.2	8	16	12.8	-	450					
SEMESTER – II (Duration – 6 Months)														
1	DSC-B	2	5	4	2	4	3.2	2	50	100	35	As per BOS Guide-lines	50	18
2	DSC-B	2						2	50					
3	DSC-B	2	5	4	2	4	3.2	2	50	100	35			
4	DSC-B	2						2	50					
5	DSC-B	2	5	4	2	4	3.2	2	50	100	35			
6	DSC-B	2						2	50					
7	DSC-B	2	5	4	2	4	3.2	2	50	100	35			
8	DSC-B	2						2	50					
9	AECC-B	2	4	3.2	-----	-----	-----	2	50	50	18			
Total		18	24	19.2	8	16	12.8	-	450			200		
Grand Total		36	48	38.4	16	32	25.6		900					
<ul style="list-style-type: none"> Student contact hours per week : 32 Hours (Min.) Theory and Practical Lectures : 48 Minutes Each DSC – Discipline Specific Core course : Select any 4 subject pairs from A1 to A38 and B1 to B38. AECC – Ability Enhancement Compulsory Course (1A & 1B)- English Practical Examination will be conducted annually for 50 Marks per course (subject). 						<ul style="list-style-type: none"> Total Marks for B.Sc.-I (Including English) : 1100 Total Credits for B.Sc.-I (Semester I & II) : 52 								
<ul style="list-style-type: none"> <i>Except English, combined passing for two theory papers of 50 marks each. i.e. Min. 35 marks required for passing out of 100.</i> <i>There shall be separate passing for theory and practical courses.</i> 														
(A) Non-Credit Self Study Course : Compulsory Civic Courses (CCC) For Sem I: CCC – I : Democracy, Elections and Good Governance														
(B) Non-Credit Self Study Course : Skill Development Courses (SDC) For Sem II: SDC – I : Any one from following (i) to (v) i) Business Communication & Presentation ii) Event management iii) Personality Development, iv) Yoga & Physical Management v) Resume, Report & proposal writing														

ii) Structure of B. Sc. Programme Sem III & IV

Structure - II

SEMESTER – III (Duration – 6 Months)																					
Sr. No.	Course (Subject) Title	TEACHING SCHEME						EXAMINATION SCHEME													
		THEORY			PRACTICAL			THEORY				PRACTICAL									
		Credits	No. of lectures	Hours	Credits	No. of lectures	Hours	Hours	Max	Total Marks	Min	Hours	Max	Min							
1	DSC-C	2	3	2.4	4	6.4	8	2	50	100	35	PRACTICAL EXAMINATION IS ANNUAL									
2	DSC-C	2	3	2.4				2	50												
3	DSC-C	2	3	2.4				4	6.4	8	2					50	100	35			
4	DSC-C	2	3	2.4							2					50					
5	DSC-C	2	3	2.4				4	6.4	8	2					50	100	35			
6	DSC-C	2	3	2.4							2					50					
7	AECC-C	4	4	3.2				---	---	---						---	---				
	TOTAL	16	22	17.6	12	19.2	24			300	---										
SEMESTER – IV (Duration – 6 Months)																					
1	DSC-D	2	3	2.4	4	6.4	8	2	50	100	35					As per BOS Guide-lines	100	35			
2	DSC-D	2	3	2.4				2	50												
3	DSC-D	2	3	2.4				4	6.4	8	2								50	100	35
4	DSC-D	2	3	2.4							2								50		
5	DSC-D	2	3	2.4				4	6.4	8	2								50	100	35
6	DSC-D	2	3	2.4							2	50									
7	AECC- C AECC- D	---	---	---				---	---	---	3	70 30	100	25 10	---	---	---				
	TOTAL	12	18	14.4	12	19.2	24			400	---	---		---	---						
		28	40	32	24	38.4	48			700	--	---	300								
<ul style="list-style-type: none"> Student contact hours per week : 32 Hours (Min.) 						<ul style="list-style-type: none"> Total Marks for B.Sc.-II (Including EVS) : 1000 															
<ul style="list-style-type: none"> Theory and Practical Lectures : 48 Minutes Each 						<ul style="list-style-type: none"> Total Credits for B.Sc.-II (Semester III & IV) : 52 															
<ul style="list-style-type: none"> DSC : - Discipline Specific Core Course : Select any 3 subject pairs, relevant to those opted as B. Sc. I, from DSC C1 to DSC C38 and/or DSC IC39 to DSC IC50 and DSC D1 to DSC D38 and/or DSC ID39 to DSC ID50. 																					
<ul style="list-style-type: none"> AECC- Ability Enhancement Compulsory Course (1C) : Environmental Studies: EVS (Theory – 70 & Project – 30 Marks) 																					
<ul style="list-style-type: none"> Practical Examination will be conducted annually for 100 Marks per course (subject). 																					
<ul style="list-style-type: none"> <i>Except Environmental Studies, combined passing for two theory papers of 50 marks each. i.e. Min. 35 marks required for passing out of 100.</i> 																					
<ul style="list-style-type: none"> <i>There shall be separate passing for theory and practical courses also for Environmental Studies.</i> 																					

ii) Structure of B. Sc. Programme Sem V & VI

Structure - III

SEMESTER – V (Duration – 6 Months)														
Sr. No.	Subject Title	TEACHING SCHEME						EXAMINATION SCHEME						
		THEORY			PRACTICAL			THEORY				PRACTICAL		
		Credits	No. of lectures	Hours	Credits	No. of lectures	Hours	Hours	Theory	Internal	Min Marks	Hours	Max Marks	Min Marks
1	DSE-E	2	3	2.4	8	20	16	2	40	10	14+4=18	PRACTICAL EXAMINATION IS ANNUAL		
2	DSE-E	2	3	2.4				2	40	10	14+4=18			
3	DSE-E	2	3	2.4				2	40	10	14+4=18			
4	DSE-E	2	3	2.4				2	40	10	14+4=18			
5	AECC-E	2	4	3.2				---	---	---	2			
TOTAL		10	16	12.8	8	20	16		200	50	---			
SEMESTER – VI (Duration – 6 Months)														
1	DSE-F	2	3	2.4	8	20	16	2	40	10	14+4=18	As per BOS Guidelines	200	70
2	DSE-F	2	3	2.4				2	40	10	14+4=18			
3	DSE-F	2	3	2.4				2	40	10	14+4=18			
4	DSE-F	2	3	2.4				2	40	10	14+4=18			
5	AECC-F	2	4	3.2				---	---	---	2	40	10	14+4=18
TOTAL		10	16	12.8	8	20	16		200	50	---			
GRAND TOTAL		20	32	25.6	16	40	32		400	100	--	---	200	
<ul style="list-style-type: none"> • Student contact hours per week : 32 Hours (Min) • Theory and Practical Lectures : 48 Min. Each • DSE- Discipline Specific Elective. A candidate shall select one course (subject) from the three Courses (Subjects) selected at B.Sc. – II. Select any 4 pairs of papers from DSE- E1 to DSE - E84 for Sem – V and DSE - F1 to DSE - F84 for Sem - VI • AECC- Ability Enhancement Compulsory Course (E & F) : English • Practical Examination will be conducted annually for 200 Marks. • There shall be separate passing for theory, internal and practical. 														
<p>(A) Non-Credit Self Study Course : Compulsory Civic Courses (CCC) For Sem V: CCC – II : Constitution of India and Local Self Government</p>														
<p>(B) Non-Credit Self Study Course : Skill Development Courses (SDC) For Sem VI: SDC – II: Any one from following (vi) to (x) vi) Interview & Personal Presentation Skill, vii) Entrepreneurship Development Skill, viii) Travel & Tourism, ix) E-Banking & Financial Services, x) RTI & Human Right Education (HRE), IPR & Patents</p>														

CBCS R.B. Sc. 3: (B) List of courses:

i) B. Sc. Part 1 (Sem I & II),

Course code	Name of Course	Course code	Name of Course
B. Sc. 1: Sem I DSC – 1A to 38 A			
DSC A1	Physics I	DSC A21	Geology I
DSC A2	Physics II	DSC A22	Geology II
DSC A3	Chemistry I	DSC A23	Seed Technology I
DSC A4	Chemistry II	DSC A24	Seed Technology II
DSC A5	Mathematics I	DSC A25	Microbiology I
DSC A6	Mathematics II	DSC A26	Microbiology II
DSC A7	Statistics I	DSC A27	Industrial Microbiology I
DSC A8	Statistics II	DSC A28	Industrial Microbiology II
DSC A9	Electronics I	DSC A29	Biochemistry I
DSC A10	Electronics II	DSC A30	Biochemistry II
DSC A11	Computer Science I	DSC A31	Psychology I
DSC A12	Computer Science II	DSC A32	Psychology II
DSC A13	Botany I	DSC A33	Food Science & Quality control I
DSC A14	Botany II	DSC A34	Food Science & Quality control II
DSC A15	Zoology I	DSC A35	Astrophysics I
DSC A16	Zoology II	DSC A36	Astrophysics II
DSC A17	Biotechnology (Opt) I	DSC A37	Nanotechnology (opt) I
DSC A18	Biotechnology (Opt) II	DSC A38	Nanotechnology (opt) II
DSC A19	Geography I		
DSC A20	Geography II	AECC – A	English – I

DSC: Discipline Specific Core Course

AECC – Ability Enhancement Compulsory Course

Sem II : DSC – 1B to 38B

Course code	Name of Course	Course code	Name of Course
B. Sc. 1: Sem II DSC – 1B to 38B			
DSC B1	Physics III	DSC B21	Geology III
DSC B2	Physics IV	DSC B22	Geology IV
DSC B3	Chemistry III	DSC B23	Seed Technology III
DSC B4	Chemistry IV	DSC B24	Seed Technology IV
DSC B5	Mathematics III	DSC B25	Microbiology III
DSC B6	Mathematics IV	DSC B26	Microbiology IV
DSC B7	Statistics III	DSC B27	Industrial Microbiology III
DSC B8	Statistics IV	DSC B28	Industrial Microbiology IV
DSC B9	Electronics III	DSC B29	Biochemistry III
DSC B10	Electronics IV	DSC B30	Biochemistry IV
DSC B11	Computer Science III	DSC B31	Psychology III
DSC B12	Computer Science IV	DSC B32	Psychology IV
DSC B13	Botany III	DSC B33	Food Science & Quality control III
DSC B14	Botany IV	DSC B34	Food Science & Quality control IV
DSC B15	Zoology III	DSC B35	Astrophysics III
DSC B16	Zoology IV	DSC B36	Astrophysics IV
DSC B17	Biotechnology (Opt) III	DSC B37	Nanotechnology (opt) III
DSC B18	Biotechnology (Opt) IV	DSC B38	Nanotechnology (opt) IV
DSC B19	Geography III		
DSC B20	Geography IV	AECC – B	English – II

ii) B.Sc. Part 2 (Sem III & IV)

Course code	Name of Course	Course code	Name of Course
B. Sc. 2: Sem III DSC – 1C to 38C			
DSC C1	Physics V	DSC C21	Geology V
DSC C2	Physics VI	DSC C22	Geology VI
DSC C3	Chemistry V	DSC C23	Seed Technology V
DSC C4	Chemistry VI	DSC C24	Seed Technology VI
DSC C5	Mathematics V	DSC C25	Microbiology V
DSC C6	Mathematics VI	DSC C26	Microbiology VI
DSC C7	Statistics V	DSC C27	Industrial Microbiology V
DSC C8	Statistics VI	DSC C28	Industrial Microbiology VI
DSC C9	Electronics V	DSC C29	Biochemistry V
DSC C10	Electronics VI	DSC C30	Biochemistry VI
DSC C11	Computer Science V	DSC C31	Psychology V
DSC C12	Computer Science VI	DSC C32	Psychology VI
DSC C13	Botany V	DSC C33	Food Science & Quality control V
DSC C14	Botany VI	DSC C34	Food Science & Quality control VI
DSC C15	Zoology V	DSC C35	Astrophysics V
DSC C16	Zoology VI	DSC C36	Astrophysics VI
DSC C17	Biotechnology (Opt) V	DSC C37	Nanotechnology (opt) V
DSC C18	Biotechnology (Opt) VI	DSC C38	Nanotechnology (opt) VI
DSC C19	Geography V	*	
DSC C20	Geography VI		

***Interdisciplinary Courses (IDS) (DSC - IC)**

DSC IC39	Astrophysics I	DSC IC45	Plant Protection I
DSC IC40	Astrophysics II	DSC IC46	Plant Protection II
DSC IC41	Geochemistry I	DSC IC47	Pollution I
DSC IC42	Geochemistry II	DSC IC48	Pollution II
DSC IC43	Biochemistry I	DSC IC49	Fisheries I
DSC IC44	Biochemistry II	DSC IC50	Fisheries II

Sem – IV

Course code	Name of Course	Course code	Name of Course
B. Sc. 2: Sem IV DSC – 1D to 38D			
DSC D1	Physics VII	DSC D20	Geography VIII
DSC D2	Physics VIII	DSC D21	Geology VII
DSC D3	Chemistry VII	DSC D22	Geology VIII
DSC D4	Chemistry VIII	DSC D23	Seed Technology VII
DSC D5	Mathematics VII	DSC D24	Seed Technology VIII
DSC D6	Mathematics VIII	DSC D25	Microbiology VII
DSC D7	Statistics VII	DSC D26	Microbiology VIII
DSC D8	Statistics VIII	DSC D27	Industrial Microbiology VII
DSC D9	Electronics VII	DSC D28	Industrial Microbiology VIII
DSC D10	Electronics VIII	DSC D29	Biochemistry VII
DSC D11	Computer Science VII	DSC D30	Biochemistry VIII
DSC D12	Computer Science VIII	DSC D31	Psychology VII
DSC D13	Botany VII	DSC D32	Psychology VIII
DSC D14	Botany VIII	DSC D33	Food Science & Quality control VII
DSC D15	Zoology VII	DSC D34	Food Science & Quality control VIII
DSC D16	Zoology VIII	DSC D35	Astrophysics VII
DSC D17	Biotechnology (Opt) VII	DSC D36	Astrophysics VIII
DSC D18	Biotechnology (Opt) VIII	DSC D37	Nanotechnology (opt) VII
DSC D19	Geography VII	DSC D38	Nanotechnology (opt) VIII
		*	
AECC C Environmental Studies (Theory Paper)			
AECC D Environmental Studies (Project)			

*Interdisciplinary Courses (IDS) (DSC – ID)

DSC ID39	Astrophysics III	DSC ID45	Plant Protection III
DSC ID40	Astrophysics IV	DSC ID46	Plant Protection IV
DSC ID41	Geochemistry III	DSC ID47	Pollution III
DSC ID42	Geochemistry IV	DSC ID48	Pollution IV
DSC ID43	Biochemistry III	DSC ID49	Fisheries III
DSC ID44	Biochemistry IV	DSC ID50	Fisheries IV

iii) B. Sc. Part 3 (Sem V & VI)

Discipline Specific Elective (DSE)

Course code	Name of Course	Course code	Name of Course
B. Sc. 3: Sem V DSE – 1E to 84E			
DSE E1	Physics IX	DSE E45	Seed Technology IX
DSE E2	Physics X	DSE E46	Seed Technology X
DSE E3	Physics XI	DSE E47	Seed Technology XI
DSE E4	Physics XII	DSE E48	Seed Technology XII
DSE E5	Chemistry IX	DSE E49	Microbiology IX
DSE E6	Chemistry X	DSE E50	Microbiology X
DSE E7	Chemistry XI	DSE E51	Microbiology XI
DSE E8	Chemistry XII	DSE E52	Microbiology XII
DSE E9	Mathematics IX	DSE E53	Industrial Microbiology IX
DSE E10	Mathematics X	DSE E54	Industrial Microbiology X
DSE E11	Mathematics XI	DSE E55	Industrial Microbiology XI
DSE E12	Mathematics XII	DSE E56	Industrial Microbiology XII
DSE E13	Statistics IX	DSE E57	Biochemistry IX
DSE E14	Statistics X	DSE E58	Biochemistry X
DSE E15	Statistics XI	DSE E59	Biochemistry XI
DSE E16	Statistics XII	DSE E60	Biochemistry XII
DSE E17	Electronics IX	DSE E61	Psychology IX
DSE E18	Electronics X	DSE E62	Psychology X
DSE E19	Electronics XI	DSE E63	Psychology XI
DSE E20	Electronics XII	DSE E64	Psychology XII
DSE E21	Computer Science IX	DSE E65	Food Science & Quality control IX
DSE E22	Computer Science X	DSE E66	Food Science & Quality control X
DSE E23	Computer Science XI	DSE E67	Food Science & Quality control XI
DSE E24	Computer Science XII	DSE E68	Food Science & Quality control XII
DSE E25	Botany IX	DSE E69	Plant Protection V
DSE E26	Botany X	DSE E70	Plant Protection VI
DSE E27	Botany XI	DSE E71	Plant Protection VII
DSE E28	Botany XII	DSE E72	Plant Protection VIII
DSE E29	Zoology IX	DSE E73	Fisheries V
DSE E30	Zoology X	DSE E74	Fisheries VI

DSE E31	Zoology XI	DSE E75	Fisheries VII
DSE E32	Zoology XII	DSE E76	Fisheries VIII
DSE E33	Biotechnology (Opt) IX	DSE E77	Astrophysics IX
DSE E34	Biotechnology (Opt) X	DSE E78	Astrophysics X
DSE E35	Biotechnology (Opt) XI	DSE E79	Astrophysics XI
DSE E36	Biotechnology (Opt) XII	DSE E80	Astrophysics XII
DSE E37	Geography IX	DSE E81	Nanotechnology (Opt)IX
DSE E38	Geography X	DSE E82	Nanotechnology (Opt)X
DSE E39	Geography XI	DSE E83	Nanotechnology (Opt)XI
DSE E40	Geography XII	DSE E84	Nanotechnology (Opt)XII
DSE E41	Geology IX		
DSE E42	Geology X		
DSE E43	Geology XI		
DSE E44	Geology XII	AECC E	English III

Sem – VI

Course code	Name of Course	Course code	Name of Course
B. Sc. 3: Sem VI DSE – 1F to 84F			
DSE F1	Physics XIII	DSE F45	Seed Technology XIII
DSE F2	Physics XIV	DSE F46	Seed Technology XIV
DSE F3	Physics XV	DSE F47	Seed Technology XV
DSE F4	Physics XVI	DSE F48	Seed Technology XVI
DSE F5	Chemistry XIII	DSE F49	Microbiology XIII
DSE F6	Chemistry XIV	DSE F50	Microbiology XIV
DSE F7	Chemistry XV	DSE F51	Microbiology XV
DSE F8	Chemistry XVI	DSE F52	Microbiology XVI
DSE F9	Mathematics XIII	DSE F53	Industrial Microbiology XIII
DSE F10	Mathematics XIV	DSE F54	Industrial Microbiology XIV
DSE F11	Mathematics XV	DSE F55	Industrial Microbiology XV
DSE F12	Mathematics XVI	DSE F56	Industrial Microbiology XVI
DSE F13	Statistics XIII	DSE F57	Biochemistry XIII
DSE F14	Statistics XIV	DSE F58	Biochemistry XIV
DSE F15	Statistics XV	DSE F59	Biochemistry XV
DSE F16	Statistics XVI	DSE F60	Biochemistry XVI
DSE F17	Electronics XIII	DSE F61	Psychology XIII
DSE F18	Electronics XIV	DSE F62	Psychology XIV
DSE F19	Electronics XV	DSE F63	Psychology XV
DSE F20	Electronics XVI	DSE F64	Psychology XVI
DSE F21	Computer Science XIII	DSE F65	Food Science & Quality control XIII
DSE F22	Computer Science XIV	DSE F66	Food Science & Quality control XIV
DSE F23	Computer Science XV	DSE F67	Food Science & Quality control XV
DSE F24	Computer Science XVI	DSE F68	Food Science & Quality control XVI
DSE F25	Botany XIII	DSE F69	Plant Protection IX
DSE F26	Botany XIV	DSE F70	Plant Protection X
DSE F27	Botany XV	DSE F71	Plant Protection XI
DSE F28	Botany XVI	DSE F72	Plant Protection XII
DSE F29	Zoology XIII	DSE F73	Fisheries IX
DSE F30	Zoology XIV	DSE F74	Fisheries X
DSE F31	Zoology XV	DSE F75	Fisheries XI

DSE F32	Zoology XVI	DSE F76	Fisheries XII
DSE F33	Biotechnology (Opt) XIII	DSE F77	Astrophysics XIII
DSE F34	Biotechnology (Opt) XIV	DSE F78	Astrophysics XIV
DSE F35	Biotechnology (Opt) XV	DSE F79	Astrophysics XV
DSE F36	Biotechnology (Opt) XVI	DSE F80	Astrophysics XVI
DSE F37	Geography XIII	DSE F81	Nanotechnology (Opt) XIII
DSE F38	Geography XIV	DSE F82	Nanotechnology (Opt) XIV
DSE F39	Geography XV	DSE F83	Nanotechnology (Opt) XV
DSE F40	Geography XVI	DSE F84	Nanotechnology (Opt) XVI
DSE F41	Geology XIII		
DSE F42	Geology XIV		
DSE F43	Geology XV		
DSE F44	Geology XVI	AECC F	English IV

Ordinance:

O. B. Sc. 1	<p>A) i) The students passing the Higher Secondary Examination conducted by the Maharashtra State Board of Higher Secondary Education, Pune with science stream shall be allowed to enter upon the B. Sc. Part-I Course.</p> <p style="text-align: center;">OR</p> <p>ii) The Pre-Degree Science Examination of this University.</p> <p style="text-align: center;">OR</p> <p>iii) An examination of any other statutory University or an examining Body recognised as equivalent thereto.</p> <p>B) No candidate shall be admitted to the B. Sc. Part-I Examination unless he has satisfactorily kept two terms for the course at a College affiliated to this University.</p>
O. B. Sc. 2	<p>A) No candidates shall be allowed to enter the course for the B. Sc. Part-II examination unless he has passed the B. Sc. Part-I examination or an examination of any other statutory University recognised as equivalent thereto.</p> <p>A candidate will be admitted to B.Sc. Part – II examination of this university, if he/she passes in all heads passing of university examination of B.Sc. Part – I (Sem. I & II taken together) or he will be allowed to keep term for B.Sc. Part – II if he/she is fail in not more than four heads of university examination i.e. Theory or Practical of B.Sc. Part – I (Sem. I & II taken together).</p> <p>(Note : Theory and Practical are separate heads of passing. A candidate may fail in not more than four heads of Theory or Practical examination</p> <p>Internal Examination will be compulsory for all students. If the student is absent/fail in internal examination then he/she will have to clear the internal examination in subsequent attempt in following semester.</p> <p>There will be a separate head of passing in Theory, Internal and Practical. However, ATKT rules will be followed in respect of Theory or Practical heads of passing only .</p> <p>B) No candidate shall be admitted to the B. Sc. Part-II examination unless he has satisfactorily kept two terms for the same at a College affiliated to this University.</p>
O. B. Sc.3	<p>A) No candidate shall be allowed to enter upon the course for the B. Sc. Part-III examination unless he has passed the B. Sc. Part-II examination of this University or an examination of any other Statutory University, recognised as equivalent thereto. Such a candidate must have cleared B. Sc. Part-I Examination.</p> <p><u>A candidate will be admitted to B.Sc. Part – III examination of this university, if he/she passes in all heads passing of university examination of B.Sc. Part – II (Sem. III & IV taken together) or he will be allowed to keep term for B.Sc. Part – III if he/she is fail in not more than four heads of university examination i.e. Theory or Practical of B.Sc. Part – II (Sem. III & IV taken together).</u></p> <p><u>Internal Examination will be compulsory for all students. If the student is absent/fail in internal examination then he/she will have to clear the internal examination in subsequent attempt in following semester.</u></p> <p><u>There will be a separate head of passing in Theory, Internal and Practical. However, ATKT rules will be followed in respect of Theory or Practical heads of passing only .</u></p>

	<p>B) No candidate shall be admitted to the B. Sc. Part-III Examination unless he has satisfactorily kept two terms for the same at a College affiliated to the University.</p>
<p>O. B. Sc. 4</p>	<p>Standard of Passing at B. Sc. Examination</p> <p>a) For a subject all papers shall form a separate head of passing i.e. Theory, Internal and the Practical.</p> <p>b) A student shall have to secure 35% of marks in Theory, Internal and Practical examination separately in order to pass in those heads of passing. He shall be declared to have passed the examination if he passes in all heads of passing at Parts-I, II & III semester examinations separately.</p> <p>c) In order to secure a Second Class with Hons., a candidate shall have to obtain at least 45% marks in the aggregate at University Examination.</p> <p>d) In order to secure a First Class with Hons. a candidate shall have to obtain at least 60% of marks in the aggregate at University examination.</p> <p>e) A student shall be declared to have passed in First Class (Hons.) with Distinction, if he gets at least 70% of marks in the aggregate at University examination.</p> <p>f) The class will be awarded on the aggregate total of all the subjects of Parts-I, II & III examinations, excluding the marks of English <u>or</u> Foundation Course at B. Sc. Part-III and English at B. Sc. Part-I.</p> <p>g) A. T. K. T.: A candidate will be admitted to B.Sc. Part – II examination of this university, if he/she passes in all heads of passing of university examination of B.Sc. Part – I (Sem. I & II taken together) or he will be allowed to keep term for B.Sc. Part – II if he/she is fail in not more than four heads of Theory OR Practical examination of B.Sc. Part – I (Sem. I & II taken together).</p> <p>A candidate will be admitted to B.Sc. Part – III examination of this university, if he/she passes in all heads passing of university examination of B.Sc. Part – II (Sem. III & IV taken together) or he will be allowed to keep term for B.Sc. Part – III if he/she is fail in not more than four heads of Theory OR Practical examination of B.Sc. Part – II (Sem. III & IV taken together).</p> <p>(Note :Theory and Practicals are separate heads of passing. A candidate may fail in not more than four heads of university examination.</p> <p>Internal Examination will be compulsory for all students. If the student is absent/fail in internal examination then he/she will have to clear the internal examination. There will be a separate head of passing in Theory, Practical & Internal examination . However, ATKT rules will be followed in respect of Theory or Practical heads of passing only in subsequent attempt in following semester.)</p>