





ADDING VALUE TO ENGINEERING An Autonomous Institute Affiliated to Savitribai Phule Pune University Approved by AICTE, New Delhi and Recognised by Govt. of Maharashtra Accredited by NAAC (A+ Grade) & NBA (5 UG Programs)

RULES AND REGULATIONS

For Examinations and Evaluations of UG and PG Programmes



Academic Year 2022 – 23

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Note:

The regulations hereunder are courseed to amendments as may be made by the competent Authority of the institute time to time. Any or all such amendments will be effective from such date and applicable to such batches of the candidates, including those already undergoing the program and employee of the organization, as may be decided by the competent Authority.

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ABBRIVATIONS

SPPU	Savitribai Phule Pune University
AISSMS	All India Shri Shivaji Memorial Society
IOIT	Institute of Information Technology
BOE	Board of Examination
BOS	Board of Studies
BOEE	Board of Examinations and Evaluations
HSM	Humanities and Social Sciences including Management
	courses
ISE	In Semester Evaluation
ESE	End Semester Examination
MOOCs	Massive Open Online Courses
OEC	Open Elective courses
PEC	Professional Elective courses
NPTEL	National Program of Technology Enhanced Learning
FY B Tech	First Year
SY B Tech	Second Year
TY B Tech	Third Year
B Tech	Bachelor of Technology

1. Preamble

One of Savitribai Phule Pune University's (SPPU's) prominent institutions is All India Shri Shivaji Memorial Society (AISSMS), Institute of Information Technology (IOIT), situated in Pune. The SPPU has offered the institute an autonomous status. The academic council has been provided various powers and duties under the UGC norms for autonomous colleges during the 12th plan, among which is selecting the assessment methodology. As per UGC regulations, the Board of Examination (BOE) includes the following persons.

- 1. Director / Principal (Chairman),
- 2. Dean Examinations,
- 3. Senior faculties of all Departments,
- 4. University Nominees: Director Board of Examinations and Evaluations (BOEE) of SPPU or his nominee not below the rank of Deputy Registrar.

1.1 The power and duties of Board of Examinations

- 1.1.1 The BoE shall
 - Ensure that institute's examinations and assessments are neatly organized, including the evaluation, tabulation, and declaration of results.
 - Appointment of examiners, moderators, and paper-setters from the panelists assembled by the relevant **Board of Studies (BoS)**.
 - Conduct examination reform experimentation.
- **1.1.2** Collect five sets of examination question papers for the relevant courses in sealed envelopes from paper setters. One of these sealed covers containing question papers will be selected at random by the COE or his or her nominee whose nomination has been approved by the Director or Dean Academic. The printing press or section will then receive these sealed covers with their seals intact.
- **1.1.3** The BoE shall prepare the time schedule of examinations and dates of declaration of the results at the beginning of the term and notify the same.
- **1.1.4** The BoE shall establish a subcommittee of three members, one of whom shall be chairman, to investigate and take disciplinary action for malpractices and lapses on the part of candidates, paper setters, examiners, moderators, faculties, or any other people affiliated with the conduct of examinations.

- **1.1.5** All examination answer booklets must be evaluated centrally using the Central Assessment System. All exam answer books must be coded after being first mask. The examiners will then get the coded answer books for evaluation. All answer booklets must be decrypted and de-masked following the assessment, and the moderator/evaluator will then create the result sheet.
- **1.1.6** The BoE will be presented with the subcommittee's recommendations and will then decide what disciplinary action, if any, to take. (It is required that all members be present.)
- **1.1.7** In order to prevent students, faculty, invigilators, supervisors, etc. from using unfair means during the examination process, the committee shall set up strong vigilance.
- **1.1.8** A quorum for the examination committee is two-thirds of the members. A quorum is not required for a rescheduled meeting that will be held within 15 minutes if it is called off due to a lack of quorum.
- **1.1.9** The BoE will be conducted twice during the academic year in order to any additional times that may be necessary.
- **1.1.10** The Board of Education is responsible for carrying out the tasks and obligations that the Board of Management from time to time assigns. The role of CoE, who will report to the Dean Academics, was formed to ensure that the aforementioned duties are carried out effectively. The **Table 1.1** is a bolded description of the operational system for activities related to exams.

Sr. No.	Name	Designation
01	Dr. P. B. Mane	Director, AISSMS Institute of Information Technology, Pune
02	Mr. Mahesh Kakade	Member as Director, Board of Examination and Evaluation, SPPU, Pune
03	Dr. Y. P. Patil	Member as a Senior Faculty First year Engineering
04	Dr. S. M. Bakare	Member as a Senior Faculty Electrical Engineering
05	Dr. H. D. Shinde	Member as a Senior Faculty E&TC Engineering
06	Dr. K. S. Wagh	Member as a Senior Faculty Computer Engineering
07	Dr. R. B. Dhumale	Member as a Senior Faculty AI and DS Engineering
08	Dr. M. K. Pathak	Member as a Senior Faculty Information Technology
09	Dr. B. N. Mahopatra	Member as a Senior Faculty Instrumentation Engineering
10	Dr. D. K. Shedge	Member Secretary

Table 1.1: Board of Examination / Examination Committee

2. Curriculum for Undergraduate Programme

- 2.1 Total credits for four years will be around 166.
- 2.2 As per AICTE recommendation, there will be 6 courses and 3 practical heads per semester for the First Year (FY) including Humanities and Social Sciences including Management courses (HSM) with maximum marks 700.Structure of Undergraduate Engineering program is given in Table 2.1. Structure of Semester-I and Semester-II of First Year Undergraduate Engineering Program is given in Table 2.2 and Table 2.3 respectively. The marking scheme for Semester III to Semester VIII is given in Table 2.4.
- 2.3 There will be 6courses and 3 practical heads per semester for Second Year (SY) and Third Year (TY) including Professional Elective courses (PEC), Open Elective courses (OEC), and HSM. Maximum marks for each semester will be 700.
- 2.4 There will 4 courses, 2 practical heads, and Project Stage I for the Final Year of Bachelor of Technology (B. Tech.) Semester-VII including PEC and OEC of maximum 700 marks. For B. Tech. Semester-VIII, there will be national or international Internship/ 2 Massive Open Online Courses (MOOCs)/Foreign University Certification Courses/Entrepreneurship Development/ Undergraduate Research Experience, and one online open elective course offered by Department. Maximum marks for each semester will be 700.
- **2.5** The student should appear for the MOOCs/NPTEL examination. The NPTEL examination marks will be converted into credits.
- **2.6** In case the **MOOCs/NPTEL examination is canceled/ prolonged** the institute will examine the MOOCs courses appeared by the students. In such case, final score will be considered as Average Assignment Score and Score of Examination Conducted by Institute.

Sr.	Domains	Code	AICTE Suggested
1	Humanities and Social Sciences including Management courses	HSM	12
2	Basic Science courses	BSC	25
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc.	ESC	24
4	Professional core courses	PCC	48
5	Professional Elective courses relevant to chosen specialization/branch	PEC	18
6	Open courses–Electives from other technical and /or emerging courses	OEC	18
7	Project work, seminar and internship in industry or elsewhere	PRO	15
	Total		160

Table 2.1. Structure of Undergraduate Engineering program

			T Course Title		Teaching Scheme (Hours/Week) Examination Scheme and M				d Maı	rks			
Sr No.	Course Code	(Tutorial	Practical	Credits	ISE	ESE	МТ	ЪR	OR	Total
1	FEBSC101	Engineeri	ng Mathematics-I	04			04	40	60*				100
2	FEBSC102 /FEBSC103	Engineeri: Industrial	ng Physics / Chemistry	03	-		03	40	60*	1	1	-	100
3	FEESC104	Engineeri Introducti	Engineering Graphics and Introduction to CAD			02	03		-	50	50	-	100
4	FEESC105	Engineeri	ng Mechanics	02		02	03	40	60*				100
5	FEESC106 /FEESC107	Basic Electrical Engineering /Basic Electronics Engineering					03	40	60*				100
6	FEESC108	Problem Solving and Programming I				02	04	40	60**				100
7	FEHSM109	Project Ba Managem	used Learning ent I			02	01					25	25
8	FEBSC110	Engineeri (Lab)	ng Mathematics-I			02	01				25		25
9	FEBSC111 /FEBSC112	Engineering Physics / Industrial Chemistry (Lab)				02	01				25	-	25
10	FEESC113 /FEESC114	Basic Electrical Engineering /Basic Electronics Engineering (Lab)				02	01				25		25
		Total		17	00	14	24	200	300	50	125	25	700
11	FEMC11	5	Audit Course 1	02		a. UHV- b. Sports	I (1H (1Hr	r/ wee	ek) k)				

Table 2.2: Structure of First Year Semester I Undergraduate Engineering program

* End Semester Examination (ESE) based on subjective questions.

** Practical or Activity based Evaluation.

In Semester Evaluation based on Presentation/Group Discussion/Laboratory Work/Course Project/Home Assignment/Comprehensive Viva Voce/Blog Writing/Case Study/Survey/Multiple-Choice Question (MCQ) examination **Note-** Students are required to undergo internship of 1 week under UNNAT Bharat Abhiyan after 1st semester and submit the report at the beginning of next semester.

	No. Course Code Course Name				Teach (Ho			Feaching Scheme Examination Scheme and Mar (Hours/Week)							s	
Sr No.			Theory	Tutorial	Practical	Credits	ISE	ESE	ΜL	PR	OR	Total				
1	FEBSC201	Enginee	ring Mathematics-II	03			03	40	60*				100			
2	FEBSC202 /FEBSC203	Enginee Industria	ring Physics / 11 Chemistry	03			03	40	60*				100			
3	FEESC204	Basics in	Basics in Mechanical Engineering			02	03	40	60*				100			
4	FEESC205	Environ	Environmental Informatics			02	02			50	50	-	100			
5	FEESC206 /FEESC207	Basic El /Basic E	ectrical Engineering lectronics Engineering	03			03	40	60*				100			
6	FEESC208	Problem	Solving and Programming II	03		02	04	40	60**		-		100			
7	FEHSM209	Project 1	Based Learning Management II			02	01					25	25			
8	FEBSC210	Enginee	ring Mathematics-II (Lab)			02	01				25		25			
9	FEBSC211 /FEBSC212	Engineering Physics / Industrial Chemistry (Lab)				02	01				25		25			
10	FEESC213 /FEESC214	Basic Electrical Engineering /Basic Electronics Engineering (Lab)				02	01				25		25			
			Fotal	15	00	14	22	200	300	50	125	25	700			
11	FEMC215		Audit Course 2	02		a. UI b. Sp	HV- I orts (I (1Hr 1Hr/ v	/ week week)	x)						

 Table 2.3: Structure of First Year Semester II Undergraduate Engineering program

* End Semester Examination (ESE) based on subjective questions. ** Practical or Activity based Evaluation.

In Semester Evaluation based on Presentation/Group Discussion/Laboratory Work/Course Project/Home Assignment/Comprehensive Viva Voce/Blog Writing/Case Study/Survey/Multiple-Choice Question (MCQ) examination

Course Head	ISE	ESE	PR/OR	TW Marks	Credits					
	5	Semester I	II	•	•					
Theory	200	300	-	-	16					
PR/OR/Tut	-	-	150	50	06					
Total	200	300	150	50	22					
Semester IV										
Theory	200	300	-	-	16					
PR/OR/Tut	-	-	150	50	06					
Total	200	300	150	50	22					
		Semester V	V							
Theory	200	300	-	-	16					
PR/OR/Tut	-	-	150	50	06					
Total	200	300	150	50	22					
	S	Semester V	/ I							
Theory	200	300	-	-	16					
PR/OR/Tut	-	-	150	50	06					
Total	200	300	150	50	22					
	S	emester V	II	-	-					
Theory	160	240	-	-	12					
PR/OR/Tut	-	-	200	100	04					
Total	160	240	200	100	16					
	S	emester V	III							
Theory	40	60	-	-	4					
PR/OR/Tut/Internship	-	-	200	400	12					
Total	40	60	200	400	16					

Table 2.4: The Structure for Semester III to Semester VIII

- **2.7** SY onwards one MOOC based **OEC** will be there which can be opted by students of any branch.
- **2.8** The OECs are **identified courses not matching with the PCCs and PECs** of any branch.
- **2.9** For MOOCs, Assignments marks will be converted on the scale of 40 marks and Score of examination conducted by the respective authority of MOOC or Score of ESE Conducted by Institute will be converted on the scale of 60 marks.
- 2.10 Every branch offers an Honors degree with a weightage of not more than 20 credits.
- **2.11** HSM credits at **FY will be 2** and from **SY onwards 8 credits** will have distribution as: at 3rdsemester course *Democracy, Election and Governance*, 4thsemester branch specific *course related to HSM*, 5thsemester course *Intellectual Property Rights*, 6thsemester course *Seminar and technical paper writing* with **2 credits for each course**.

2.12 The codes for courses will be as per branch first 2 digits followed by domain 3 digits, semester number 1 digit, number of course 2 digits. 2-digit branch codes will be like F.E.—
FE, Electrical—EL, E&TC — ET, Computer — CO, IT— IT, Instrumentation— IN, Artificial Intelligence and Data Science—AI.

e.g. Course, Physics for Engineers of FE, code will be FEBSC102.

3. Curriculum for Post Graduate Programme

- **3.1** Total credits for two years will be around **70**.
- 3.2 There will be 6 courses and 1 practical head per semester for the First Year (FY) including HSM and maximum marks will be 600. For Semester III, MOOC, Seminar and Project Stage I for 300 marks, and for Semester IV, Seminar and Project Stage II for 300 marks. The Structure for Semester I to Semester IV is given in Table 3.1.
 - **3.2.1** The student should appear for the NPTEL examination. The NPTEL examination marks will be converted into credits. In case the NPTEL examination is canceled/ prolonged the institute will examine the MOOCs courses appeared by the students. In such case, final score will be considered as Average Assignment Score and Score of Examination Conducted by Institute.
 - **3.2.2** For MOOCs, Assignments marks will be converted on the scale of 40 marks and Score of examination conducted by the respective authority of MOOC or Score of ESE Conducted by Institute will be converted on the scale of 60 marks.
- **3.3** HSM credits at FY will be 4 credits will have distribution as: at 1stsemester course *Introduction to constitution*, 2nd semester Human Values in Ethics and Education with 2 credits for each course.

Course Head	Duration (Hrs/Week)	UT	ESE	PR/OR	TW Marks	Total Marks	Credits
		Se	mester I				
Theory	16	200	300	-	-	500	16
PR/OR/Tut/Seminar	4	-	-	50	50	100	04
Total	20	200	300	50	50	600	20
		Se	mester Il	[
Theory	16	200	300	-	-	500	16
PR/OR/Tut/Seminar	4	-	-	50	50	100	04
Total	20	200	300	50	50	600	20
		Ser	nester II	I			
Theory	3	50	50	-	-	100	3
PR/OR/Tut/Seminar	12	-	-	100	100	200	12
Total	15	50	50	100	100	300	15
		Ser	nester IV	7			
Theory	-	-	-	-	-	-	-
PR/OR/Tut/Seminar	15	-	-	100	200	300	15
Total	15	-	-	100	200	300	15

 Table 3.1: The Structure for Semester I to Semester IV of M. tech.

3.4 The codes for courses will be as per branch first 2 digits followed by domain 3 digits, semester number 1 digit, number of course 2 digits. 2 digit branch codes will be like M. Tech. (VLSI & Embedded Systems) — VL, M. Tech. (Power Electronics and Drives) — PE.e.g. Course, Power Converters of PE, code will be PEPCC903.

4. Question Paper Setting

- 4.1 Eligibility Selection criteria for paper setters, examiners, re-assessors, and practical examiners
 - **4.1.1** The BoE shall appoint the paper setter, examiner, and reassessor. The undergraduate or postgraduate examiner must hold a postgraduate degree in the relevant or a closely related discipline of engineering.
 - **4.1.2** The paper setters must have a minimum of three years of field, industrial, or teaching experience. However, experienced faculty members may be hired as an exceptional instance with proper BoE approval if specialists are not readily available in accordance with the aforementioned rules.
 - **4.1.3** No one has the right to claim a position as a paper setter, examiner, re-assessor, or in any other position associated with assessment activity.
 - **4.1.4** The following rules must be followed when appointing someone to be a paper setter, examiner, re-assessor, or practical examiner.
 - Two months prior to the End Semester Examination (ESE), the setter must be appointed.
 - The assessor will be appointed fifteen days before to the ESE of the semester.
 - The practical examiner must be appointed fifteen days prior to the practical examination.
 - **4.1.5** If the external examiner is chosen from an Industry or Organization, they must have a minimum of three years of professional experience in the relevant field for FY, SY, and TY and a minimum of five years for B. Tech.
 - **4.1.6** The external examiner should confirm their acceptance immediately, but if they are unable to do so owing to prior commitments, they must notify the relevant body within a week of the appointment date.
 - **4.1.7** The paper setter, examiner, and re-assessor must adhere to any instructions provided by the examination board from time to time on the format of question papers, etc.

4.2 Directions for the Author of the Question Paper

4.2.1 The question paper for the final exam of the semester will be worth 60 marks and have a maximum time limit of 2 hours and 30 minutes. However, as stated in the curriculum, the duration may be 4 hours for practical or activity-based evaluations.

- **4.2.2** The paper setter is not allowed to reveal his or her position. Any correspondence pertaining to the examination is private, and discretion should be exercised.
- **4.2.3** If a member of the AISSMS Institute of Information Technology, Pune's teaching staff meets the meet the eligibility for paper seating, he or she must accept the appointment as a paper setter.
- **4.2.4** In accordance with the appointment order, the paper setter must provide three paper sets, solutions, and a grading scheme. Least one set from an outside paper setter.
- **4.2.5** The question-paper format should be exact. The question paper should be created by the paper setter so that the questions
 - i. are written in clear, concise, and comprehensible language
 - ii. are unambiguous
 - iii. ask for the appropriate marks
 - iv. Cover the full course material.
 - v. Adhere to any periodic instructions about the outcome-based education system and/or the choice-based credit system.
- **4.2.6** The question paper formats as per Blooms taxonomy for F. Y. B. Tech. to Final Year B. Tech are given in **Table 4.1 to Table 4.4**.
- **4.2.7** The questions should be serially numbered, starting with 01, then 02, then 03, then 04, and so on.
- 4.2.8 If there are any sub-questions, they should be numbered A, B, C, D, ...
- **4.2.9** Marks shall be indicated on the right side of sub-question or the question.
- **4.2.10** Instead of just assessing memory or book knowledge, questions should be constructed to test the ability to apply the knowledge that has been learned. According to the levels of Bloom's Taxonomy, the question paper may include inquiries measuring knowledge, skill, and thinking capacity.
- **4.2.11** The question number should be written below any diagrams or sketches, which should be produced in black ink or with a black ballpoint pen and affixed separately (to the question paper).

Q.1.	Blooms Level: Remember, Weightage : 30%, Marks:18								
Α	Question on Unit III	[6]							
В	Question on Unit IV	[6]	Solve any Three Questions						
C	Question on Unit V	[6]	Solve any Three Questions						
D	Question on Unit VI	[6]							
Q.2.	Blooms Level: Under	rstand, We	ightage: 30%, Marks: 18						
Α	Question on Unit III	[6]							
В	Question on Unit IV	[6]	Solve any Three Questions						
C	Question on Unit V	[6]	Solve any Three Questions						
D	Question on Unit VI	[6]							
Q.3.	Blooms Level: Ap	ply, Weigh	tage : 20%, Marks: 12						
Α	Question on Unit III	[6]	All Questions are compulsory						
В	Question on Unit IV	[6]	All Questions are compulsory						
Q.4 .	Blooms Level: App	ply, Weigh	tage : 20%, Marks: 12						
A	Question on Unit V	[6]	All Questions are compulsory						
В	Question on Unit VI	[6]	An Questions are computed y						

Table 4.1: Question paper formats for First Year B. Tech.

 Table 4.2: Question paper formats for Second Year B. Tech.

	Blooms Level: Remember						
Q.1.	Weightage : 20%						
	Marks:12						
A	Question on Unit III	[4]					
В	Question on Unit IV	[4]	Solve any three questions				
C	Question on Unit V	[4]	Solve any three questions				
D	Question on Unit VI	[4]					
	Blooms Level: Understand						
Q.2.	Weightage: 30%						
	Marks:18	-					
A	Question on Unit III	[6]					
В	Question on Unit IV	[6]	Solve any three questions				
C	Question on Unit V	[6]	Solve any three questions				
D	Question on Unit VI	[6]]				
	Blooms Level: Apply						
Q.3.	Weightage : 40%						
	Marks:24						
A	Question on Unit III	[6]					
В	Question on Unit IV	[6]	All questions are compulsory				
C	Question on Unit V	[6]	All questions are computed y				
D	Question on Unit VI	[6]					
	Blooms Level: Analyze						
Q.4.	Weightage : 10%						
	Marks: 06						
Α	Question on Unit III/ IV	[6]	Any one question				
В	Question on Unit V/VI	[6]	Any one question				

	Table 4.3: Question paper fo	rmats for '	Third Year B. Tech.
	Blooms Level: Remember		
Q.1.	Weightage : 20%		
	Marks:12		
Α	Question on Unit III	[4]	
В	Question on Unit IV	[4]	Solve ony three questions
С	Question on Unit V	[4]	Solve any three questions
D	Question on Unit VI	[4]	
	Blooms Level: Understand		
Q.2.	Weightage: 30%		
_	Marks:18		
Α	Question on Unit III	[6]	
В	Question on Unit IV	[6]	
С	Question on Unit V	[6]	- Solve any three questions
D	Ouestion on Unit VI	[6]	
	Blooms Level: Apply	L-J	
0.3.	Weightage : 40%		
C	Marks:24		
А	Ouestion on Unit III	[8]	
B	Question on Unit IV	[8]	
C	Question on Unit V	[8]	- Solve any three questions
D	Question on Unit VI	[8]	-
	Blooms Level: Analyze	[0]	
04	Weightage • 10%		
Q. - .	Marks: 06		
Δ	Question on Unit III/ IV	[6]	
R	Question on Unit V/VI	[6]	- Solve any one question
D	Table 4.4: Question paper	formats fo	rFinal Voor P. Tooh
	Plooms Level: Demember	iormats io	IT filat Teat D. Teefi.
01	Weightage • 10%		
Q.1.	Marke 06		
Δ	Question on Unit III/IV	[06]	
R R	Question on Unit W/VI	[06]	- Solve any one question
D	Right Lovel: Understand	[00]	
0.2	Weightege: 20%		
Q.2.	Morke 12		
٨	Question on Unit III	[<i>1</i>]	
A B	Question on Unit IV	[4]	-
	Question on Unit V	[+] [/1	Solve any three questions
	Question on Unit V	[4] [/1	4
	Plaama Lavale Ararla W.	[[4]	 N/ Montra 20
<u>v.s.</u>	Divolis Level: Apply, Welg		70, WIAIKS: 30
A	Question on Unit III	[ð]	4
B	Question on Unit IV	[ð]	All questions all compulsory
	Question on Unit V		-
D	Question on Unit VI	[7]	
Q.4.	Blooms Level: Analyze, We	eightage :	20%, Marks: 12
A	Question on Unit III/ IV	[6]	All questions all compulsory
B	Question on Unit V/VI	[6]	a questions un compuisory

- **4.2.12** Paper setter should prepare synoptic model responses and a marking system with the distribution of points for the question in order to aid in the evaluation of answer books.
- **4.2.13** In the case of numerical issues, the solution to the issues involving the distribution of marks for various stages should be included in the marking scheme.
- **4.2.14** The paper setter must precisely list any charts, tables, IS codes, data books, and other items needed for the exam.
- **4.2.15** In the format provided to the setter, common "instructions to candidates" are already indicated. However, the paper setter is asked to remove any unnecessary instructions or add any if necessary.
- **4.2.16** A declaration and the prepared paper must be submitted together by each paper setter. Soft copy of paper should be submitted to the COE.
- **4.2.17** A copy of the course's curriculum and a teaching plan produced by a course faculty member who has taught the course are given to each external paper setter. To better comprehend the depth of a certain syllabus topic covered by the course coordinator, the paper setter may refer to this teaching plan when creating the question paper as given in Table 4.5.

Unit	Topics of the syllabus covered / to be covered	Weightage / marks distribution
1.		
2.		
3.		
4.		
5.		
6.		

 Table 4.5: Topic wise marks distribution

5. Examination and Evaluation for Under Graduate Programme

5.1 Assessment

There will be internal assessment ISE I and ISE II based on Unit I and Unit II respectively. ESE will be external assessment based on Unit III to Unit VI.

5.2 Internal Assessment

Term Work (TW) will be evaluated based on **continuous assessment and corresponding submission**. It should be assessed by subject teacher of the institute for first to sixth semester and by the external examiner at seventh and eighth semester. At the end of the semester, the final grade for a Term Work shall be assigned based on the performance of the student and is to be submitted to the respective department. A student who fails in the Term Work on account of unsatisfactory performance shall be given F grade and on the account of inadequate attendance shall be given FX grade. Failing in a particular course Term Work shall not be the criteria for detention in the semester.

The evaluation parameters for TW are given in Table 5.1.

Understanding	Presentation	Activity	Timely submission
50%	50% 20%		10%

5.3 External Assessment

5.3.1 Theory Evaluation:

- a. In Semester Evaluation (ISE): ISE will be conducted by respective course teacher by using 2 different modes mentioned in Table 5.2 of 20 marks each as per the schedule mentioned in Academic calendar.
- b.**End Semester Examination (ESE):** ESE of 60 Marks for 3 courses will be conducted at the end of semester based on **Subjective Questions in offline mode.** ESE assessment will be done at the CAP Centre designated by the College by the Director who is appointed as an examiner for the subject as per 48(3) panel.
- c.For remaining courses 60 marks will be evaluated based on Activity or Practical based Evaluation (APE).
- d.After checking the answer sheets of ISE and ESE, the **doubt of the examinee will be** resolved by showing the answer sheet in specified period declared by the Examination Authority.

C. No	Madaa fan ICE	Assessment Rubrics for the ISE				
51. 10.	WIDDES IOF ISE	4 Marks	4 Marks	4 Marks	4 Marks	4 Marks
5.3.1.i	Presentation	Knowledge of the topic and contents of the slides	Literature Review	Presentation Skills	Time Limit	Performance
5.3.1.ii	Group Discussion	Level of Participation	Knowledge of the Topic	Argumentation	Communication skill	Attitude and behavior
5.3.1iii	Laboratory Work	Realization of problem statement	Design	Procedure and Measurements skills (Testing)	Documentation	Performance in question and answer session
5.3.1.iv	Course Project	Literature Review	Objective of Project	Quality of work	Report writing	Viva
5.3.1.v	Home Assignment	Understanding	Thinking and Reasoning	Content Presentation	Plagiarism	Timeline
5.3.1.vi	Comprehensive Viva Voce	Knowledge about the topic	Communication Skills	Co-relation of concepts with application	Responsiveness	Question answers

 Table 5.2: Modes of In Semester Evaluation

5.3.1.vii	Blog Writing	Comprehensiveness and overall coverage of the blog	Understanding	Ease of understanding of the blog for the reader	Originality of blog contents	Citations
5.3.1.viii	Case Study	Clarity	Understanding of case handled, tools and technology used	Approach of analysis of case	Significance and relevance of findings	References, Bibliography, literature survey
5.3.1.ix	Survey	Comprehensiveness of the survey	Sample Size	Data analysis and interpretation	Usage of tool for report writing	Report
5.3.1.x	Multiple-Choice Question (MCQ) examination	The paper will be based on Blooms Taxonomy				
5.3.1.xi	Subjective examination	The paper will be based on Blooms Taxonomy				

Note: If any course coordinator is proposing a new innovative method other than these mentioned above. She/he should get rubrics approved from COE.

5.3.2 Practical/Oral /Seminar/Project Evaluation

Practical/Oral /Seminar/Project examinations by the internal and external examiners will be conducted for Practical heads at the end of each semester as per the schedule in Academic Calendar. These practical/oral examinations for FY, SY, TY and B. Tech. will be conducted in the presence of an External Examiner appointed by the competent authority.

6. Examination and Evaluation for Post Graduate Programme

6.1 There will be internal and external assessment. ISE I and ISE II will be based on Unit I and Unit II respectively. ESE will be based on Unit III to Unit VI.

6.2 Internal Assessment

Term Work (TW) will be evaluated on the basis of **continuous assessment and corresponding submission**. The evaluation parameters for TW are given in **Table 6.1**.

Tuble 0.1. Evaluation Tubleters for Continuous Tissessment					
Understanding	nderstanding Presentation		Timely submission		
50%	20%	20%	10%		

Table 6.1: Evaluation Parameters for Continuous Assessment

6.3 External Assessment

6.3.1 Theory Evaluation:

a. In Semester Evaluation (ISE): ISE will be conducted by respective course teacher by using 2 different modes mentioned in Table 6.2of 20 marks each as per the scheduled mentioned in Academic calendar.

- b. End Semester Examination (ESE): ESE of 60 Marks for 3 courses will be conducted at the end of semester based on Subjective Questions in offline mode.
- c. For remaining courses 60 marks will be evaluated based on Activity or Practical based Evaluation (APE).
- d. After checking the answer sheet of ESE, the doubt of the examinee will be resolved by showing the answer sheet in specified period declared by the Examination Authority.

Sr. No	Modes for ISE	Assessment Rubrics for the ISE				
SF. NO.		4 Marks	4 Marks	4 Marks	4 Marks	4 Marks
6.3.1.i	Presentation	Knowledge of the topic and contents of the slides	Literature Review	Presentation Skills	Time Limit	Performance
6.3.1.ii	Group Discussion	Level of Participation	Knowledge of the Topic	Argumentation	Communication skill	Attitude and behavior
6.3.1iii	Laboratory Work	Realization of problem statement	Design	Procedure and Measurements skills (Testing)	Documentation	Performance in question and answer session
6.3.1.iv	Course Project	Literature Review	Objective of Project	Quality of work	Report writing	Viva
6.3.1.v	Home Assignment	Understanding	Thinking and Reasoning	Content Presentation	Plagiarism	Timeline
6.3.1.vi	Comprehensive Viva Voce	Knowledge about the topic	Communication Skills	Co-relation of concepts with application	Responsiveness	Question answers
6.3.1.vii	Blog Writing	Comprehensiveness and overall coverage of the blog	Understanding	Ease of understanding of the blog for the reader	Originality of blog contents	Citations
6.3.1.viii	Case Study	Clarity	Understanding of case handled, tools and technology used	Approach of analysis of case	Significance and relevance of findings	References, Bibliography, literature survey
6.3.1.ix	Survey	Comprehensiveness of the survey	Sample Size	Data analysis and interpretation	Usage of tool for report writing	Report
6.3.1.x	Multiple-Choice Question (MCQ) examination	The paper will be based on Blooms Taxonomy				
6.3.1.xi	Subjective	The paper will be based on Blooms Taxonomy				

 Table 6.2: Modes of In Semester Evaluation

Note: If any course coordinator is proposing a new innovative method other than these mentioned above. She/he should get rubrics approved from COE.

6.3.2 Practical /Seminar/Project Evaluation:

Practical/Oral examinations by the internal and external examiners will be conducted for Practical heads at the end of each semester as per the schedule in Academic Calendar.

- a. The final examination for practical heads will normally be held after the End Semester Examination as per the Academic Calendar.
- b. Practical examination shall be conducted for every practical course, seminar and Project, at the end of the semester.
- c. These practical/oral examinations for FY and SY will be conducted in the presence of an External Examiner appointed by the competent authority.

7. Unfair means / malpractice at Examination

7.1 General

The Maharashtra Act No. XXXI of 1982, (Appendix-A)which provides for avoiding Malpractices at the University/College/Board Examinations, was passed by the Maharashtra government. Use of unfair means of any type by an examiner, anyone, or anyone connected to the examination during the conduct of the examination is a cognizable and non-bailable offence, according to the act's relevant section. The act must be implemented using the following process.

7.2 Competent Authority

The Academic Council shall be the competent authority to establish a complaint redress committee upon receipt of a report regarding the use of unfair means by any student or person at an examination, including a violation of any rules established by institute authorities for proper conduct of examination. The student/person/s using, attempting to use, aiding, abating, instigating, or permitting the use of unfair means at the examination center must be the subject of an investigation, recommendation, and appropriate disciplinary action by the complaint redress committee.

When members of the teaching staff or other personnel participating in exam administration use unfair methods, the complaint redress committee shall look into the situation and report its findings and recommendations to the Academic Board.

7.3 Procedure for dealing with Unfair means Cases at Examination Centre.

If unfair measures are used, the Chairman BOS in question must pursue these steps.

a. The student will be asked to turn in his or her answer book and any unfair means material they may have discovered in their hands to the Chairman BOS respective program.

- b. The concerned examinee's signature must be collected on the pertinent material and listed there. All pertinent materials and documents must be signed by the concerned invigilator and countersigned by the Chairman BOS of the relevant program.
- c. Mark the student's answer book as "suspected unfair methods Case" and confiscate it together with any unfair means-related materials. Obtain the examinee's Statement in Form No. E-22and, if necessary, provide the examinee with a new response book that is appropriately designated as the "Second Answer book."
- d. Obtain his or her signature on **Form No.E-24** stating that the decision made by the relevant competent authority in their case will be final and binding on them and will let them to proceed with their exams.
- e. The Chairman BOS of the concerned program shall receive the Statement of the Concerned Invigilator in Form No.E-23 and shall make a Forwarding Remark in the same Format. If the test taker declines to provide a statement or an undertaking, the Chairman BOS and the relevant invigilator must make a note of it under their signatures.
- f. Send the examinee a show-cause notice in **Form No.E-25** asking them to appear before the complaint redress committee.
- g. In the event of impersonation or violence, dismiss the offending examinee from the exam, deny him/her permission to sit the remaining exams, and notify the COE of the action taken.
- h. Case According to the provisions of Maharashtra Act No. XXXI, 1982, may be reported to the concerned Police station in a designated Form No. E-26for the prevention of malpractices in University/board/other examinations and it should be informed to COE.
- i. The Chairman BOS of the concerned program shall forward to the COE all the materials and list of materials mentioned in clause a), as well as the statement and undertaking of the examinee in Form Nos. E-22 & E-24 and the statement of the Invigilator in Form No. E-23, along with the forwarding remarks, in a separate, sealed envelope marked "Unfair means case."
- j. In the event that unfair means of the oral variety are used, the invigilator and/or the concerned authorized person must document the relevant facts in writing and inform the COE of them via the Chairman BOS of the relevant program.

k. After determining the primary facts of a malpractice complaint received from the Chairman BOS in question, the COE shall forward it to the Complaint Redress Committee. The COE /concerned officer will represent the case of malpractice that was brought about by him before the Complaint Redress Committee, the police authority, and the court of justice, and will handle the case until it is completely resolved.

8. Declaration of Result

8.1 In Semester Evaluation:

After ISE, the Course Teacher will complete the valuation **within seven working days from the last date of completion of ISE**. Examination section shall prepare the result. The marks will be available on candidate's login and copy of same will be send to respective department, one copy will be sent to COE and third copy will be retained by course coordinator/ program head/program Chairman BOS for record.

8.2 Term Work Assessment:

Assessment of laboratory course of a student shall be carried on continual basis throughout the semester. At the end of each experiment/practical a faculty will assess the student based on the parameters given in **Table 5.2**. This assessment shall be done immediately after the experiment is completed. The faculty has to take signature of student immediately after assessment a token that the student is made aware of the marks scored in that practical experiment. At the end of semester average marks of all experiments will be calculated and result will be prepared within stipulated period. **One copy will be displayed on notice board in respective department**, one copy will be sent to COE and third copy will be retained by Chairman BOS for record.

8.3 End Semester Examination Result:

Result will be declared by Chairman BOS within **specified period declared by the Examination Authority**.

8.4 Preparation of Grade points by Course Coordinator

Concerned course co-ordinator shall enter all the marks i.e. Term Work, In Semester Examination, and End Semester Marks of the students obtained in respective Theory / Practical course in stipulated time declared by competent authority. The examination and

Evaluation section will declare the result along with Grades and Credits in respective course along with statistical parameters.

8.5 Results shall be declared **within 15 to 21 working days** after the last theory/practical examination.

8.6 **Rule of passing:**

- 8.6.1 To pass the Term Work / Practical / Oral/Presentation the student has to get Minimum of 40 % marks in each respective examination head.
- 8.6.2 To pass the Theory Course head the student has to get minimum of 40 % marks in End Semester Examination (ESE) and total marks 40.
- **8.6.3** The failing students in particular course can appear the ESE to pass the course in any semester. ISE marks of particular course will be retained as it is. The failing student in ISE in odd semester can appear in odd semester only. Similarly for the course of even semester will have to appear in the even semester only. Students can carry forward the ISE marks of previously appeared ISE.
- **8.6.4** Re-examination for F.Y., S. Y., T. Y., and Final Year will be conducted two week after the announcement of final result.
- 8.6.5 To earn credits of a course (Theory/Term Work/Practical/Oral/Presentation) student must pass the course with minimum 40% passing marks/grade.
- 8.6.6 A student can register for the third semester (SY), if student earns minimum 50% credits of the total of first and second semesters (FY) with mandatory submission of internship report as mentioned in FY B-Tech Course Structure Semester I.
- 8.6.7 A student can register for the fifth semester (TY), if student earns minimum 50% credits of the total of third and fourth semesters (SY) and all the credits of first and second semester (FY) with mandatory submission of Internship/Certification Courses/Add on Courses/ Value Addition Courses/Skill Development Courses report as mentioned in SY B-Tech Course Structure Semester I.
- **8.6.8** A student can register for the seventh semester (BY), if student earns minimum 50% credits of the total of fifth and sixth semesters (TY) and all the credits of third and fourth semester (SY) with mandatory submission of Internship/Certification Courses/Add on Courses/ Value Addition

Courses/Skill Development Courses report as mentioned in TY B-Tech Course Structure Semester I.

- **8.6.9** A student will be awarded the bachelor's degree if student earns total credits and clears all the mandatory noncredit audit courses in respective semesters.
- **8.6.10** Ordinances: Ordinances will be applicable as per Savitribai Phule Pune University norms.
- 8.6.11 Honors: The program will be available for getting Honors Degree to the students. As clearly mentioned in AICTE Handbook-2020, the explicit Honors for the specific undergraduate disciplines will be available. Additional 20 credits must be earned by the learners to secure Honors.

8.7 Rules and Regulations for Honors Programs:

- **R1.1:** It is absolutely not mandatory to any student to opt for Honors Program. Choice is given to individual student to undertake Honors programs from the third year (Fifth Semester) to fourth year (Eighth Semester). Honors programs will be opted from offered programs by Department. Once selected student will not be permitted to change the Honors program in forthcoming semesters.
- **R1.2:** The registration for Honors Program will lead to gain additional credits to such students. The result of Honors Program will get reflected in ledgers to be maintained at Institute. After the completion of the Honors program by concerned students, details of credits earned in Honors program are printed in the mark sheet of eighth semester. For those students, who will not be able to complete Honors program, details about the additional credits earned will not get printed on final marksheet.
- **R1.3:** Credits earned through registration and successful completion of the Honors Program will not be considered for the calculation of SGPA or CGPA. As per the standard practice, SGPA and CGPA calculations will be done with common base only by considering mandatory credits assigned for the Bachelor program as per the structure approved by the Academic Council.
- **R1.4:** Students once registered for the program need to complete all credits assigned for the specific Honors program in the period of 4 years from the Semester-V. Degree with Honors will be awarded only after the completion of Honors program along with respective Under Graduate (UG) program degree. Student may opt to cancel the

registration for Honors within this period of 4 years. After 4 years expire automatically Bachelor's degree will be awarded to such a student provided he has earned the credits needed for graduation.

- R1.5: Backlog Honors courses will not contribute in the decision of A.T.K.T.
- **R1.6**: Additional examination fees as per prevailing rules and regulations will be charged from those students who had registered for Honors Program to match the expenses.
- **R1.7**Examinations for Honors Program will get organized at the Institute Level. Question paper will be common for all students who had opted/registered for the specific Honors Program.

8.8 Backlog Examination/ Re-examination Scheme:

- A student shall have to register for the Backlog or Re-examination Course/Courses by paying additional examination fees for that particular course as per the norms.
- Backlog Examination or Re-examination will be conducted only for those students whose term has been granted but failed in any course in ISE, ESE or Practical/Oral/Term Work examination. No Backlog Examination will be conducted for detained students.
- 'P' on the grade card/ mark sheet will indicate that a particular course has been passed in one attempt.
- '*' on the grade card/ mark sheet will indicate that a particular course has been passed in more than one attempt. The rankers list will be prepared only for students clearing all the courses in the first attempt.

8.9 Term Validity:

- Students who have passed the final year of graduation in all courses and only failed in certain courses of the pre-final year (T.Y.-B. Tech.) will be required to complete the degree by re-registering the course running in that year. However, the performance of such students in all the passed courses of the final year will be considered.
- If the students have not completed the course in M = N + 2 years i.e. year of course and additional two years then as per the guideline of University Grants Commission they will be required to re-register the year in which they failed and complete the remaining course in two years.

Where, M= Maximum duration to complete the Programme, N= Normal or Minimum duration prescribed for completion of programme.

8.10 Special Examination: Special examination may be conducted for the students' with legitimate reasons such as representing the institute/university in state/national/international events or any other reasons with permission of competent authority.

9. Grading System

9.1 Passing Grade: A grade is assigned to each head based on marks obtained by a student in examination of the course. The marks obtained Unit tests and End-Semester Examination (ESE) are considered together to calculate the grade of the course. These grades, their equivalent grade points are given in **Table 9.1** shows the format.

Marks	Grade points	Grade	Remark	
90-100	9.00-10.00	0	(Outstanding)	
85-89	8.50-8.90	A+	(Excellent)	
75-84	7.50-8.49	А	(Very Good)	
65-74	6.50-7.49	B+	(Good)	
55-64	5.50-6.49	В	(Average)	
43-54	4.25-5.49	С	(Satisfy)	
40-42	4.00-4.24	Р	(Pass)	
0-39	0	F	(Fail)	
٨D	0	IC	(Absent) Absent for exam but continue for the	
AD	0	IC.	course	
	0	DX	Detained, Readmission to course	
AC		PP	Passed (only for non credit courses)	
AC		NP	Passed (only for non credit courses)	

 Table 9.1:Equivalent Grade Points

9.2 Grade Explanation:

- **9.2.1** The grades O, A+,A, B+, B, C, D, E,, F, AB, DX, IC, PP and NP are passing grades.
- **9.2.2** A candidate acquiring any one of these grades in a course shall be declared as PASS, and student shall earn the credits for a course only if the student gets passing grade in that course.
- **9.2.3** F Grade The grade F shall be treated as a failure grade.
- **9.2.4** The student with F grade will have to pass the concerned course by appearing for the backlog examination.
- **9.2.5** The student with F grade for any stage of the Project work will have to carry out additional work/ improvement as suggested by the examiners and appear for the backlog examination.

- **9.2.6** PP and NP Grade -The student registered for audit course shall be awarded the grade PP after satisfactory completion of audit course and shall be included in the Semester grade report for that course, provided student has the minimum attendance as prescribed by the institute and satisfactory internal performance and secured a passing grade in that course. Student who is unable to complete audit course will be awarded as NP grade.
- **9.2.7** DX Grade-The grade DX in a course is awarded by the college, if a student does not maintain the minimum attendance in the Lecture / Tutorial class as prescribed by the institute and/or his performance during the semester is not satisfactory and/or he/she fails in the Term Work head of that course.
- **9.2.8** The student with DX grade in a given course is not permitted to take the ESE in that course. Such a student will have to re-register for the course.
- **9.2.9** In Semester Evaluation (ISE) marks will not be considered for students whose term has been detained. Such students are required to re-register in the year of detention and appear for ISE.
- **9.2.10** Students who have been detained in the first semester will not be able to take admission in the second semester of that year. Such students can complete both semester courses in the next academic year.
- **9.2.11** Students who have been detained in the second semester can register for the second semester in the next academic year. The performance of first semester of previous academic year will be considered and their marks will be retained as it is.
- 9.2.12 The student with F/DX in a course shall not be awarded any credits for that Course.

9.3 Performance Indices:

- **9.3.1** The semester end grade sheet will contain grades for the courses along with titles and SGPA. Final grade sheet and transcript shall contain CGPA. SGPA and CGPA are calculated up to two decimal places by rounding off.
- **9.3.2** SGPA -The performance of a student in a semester is indicated by a number called the Semester Grade Point Average (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses, seminars and projects registered by the student during the semester.

Semester Grade Point Average (SGPA) = $\frac{\sum_{i=1}^{p} C_{i}G_{i}}{\sum_{i=1}^{p} C_{i}}$ SGPA= $\frac{\sum (GradePointsEarned) X (CreditsForEachCourse)}{Total Credits}$ For Example: suppose in a given semester a student has registered for five courses having credits C1, C2, C3, C4, C5 and his / her grade points in those courses are G1, G2, G3, G4, G5 respectively. Then students

 $SGPA = \frac{C1G1 + C2G2 + C3G3 + C4G4 + C5G5}{C1 + C2 + C3 + C4 + C5}$

9.4 CGPA: The CGPA is the weighted average of the grade points obtained in all the courses (Theory/term work/practical/oral/presentation) of first semester to eighth semester for the students admitted in the First year and third to eighth semester for the students directly admitted at Second year. CGPA is calculated in the same manner as the SGPA.

CGPA= (SGPAs of All semesters in an academic year)/ Number of semesters

9.5 In case of a student passing a failed course or in case of improvement, the earlier grade would be replaced by the new grade in calculation of the SGPA and CGPA.

9.6 Result

Based on the performance of the student in the semester examinations, the college will declare the results on website and issue the Semester Grade sheets. The class shall be awarded to a student on the CGPA calculated. The award of the class shall be as per **Table 9.2**.

Table 9.2: Award of the Class

Sr. No.	CGPA	Class of the degree awarded
1	7.75 or more than 7.75	First Class with Distinction
2	6.75 or more but less than 7.75	First Class
3	6.25 or more but less than 6.75	Higher second Class
4	5.5 or more but less than 6.25	Second Class

9.7 Grade Improvement Scheme

- **9.7.1** The students admitted in odd term, having their CGPA less than 6.75 (required CGPA for first class as per AICTE norms) will be given chance to improve their CGPA above 6.75 by appearing in maximum two theory course in which they got pass grade. If a student gets less marks in the paper he/she has applied for grade improvement will retain initial marks.
- **9.7.2** For students who have passed the final year: Students who want to improve their grade can repeat End Semester Examinations of any three courses from the first year, second year, third year, or final year. For grade improvement, students can appear for the examination within five years after passing the final year. If the student gets less mark in the grade improvement examination, the marks in the previous examination will be considered.

9.7.3 A student shall have to register for the Grade Improvement by paying additional examination fees for that particular course as per the norms.

9.8 Award of Degree

A student shall be eligible for the award of all Undergraduate and Postgraduate Degree from the College and the University provided the student as:

- **9.8.1** Registered and passed all the prescribed courses and earned minimum credit requirement for the degree.
- **9.8.2** Paid all the institute dues.
- **9.8.3** No case of indiscipline pending against him/her.
- **9.8.4** Obtained eligibility certificate from administrative office.
- 9.8.5 Degree will not be awarded in case of incompletion of eligibility criteria.
- **9.8.6** Satisfied all the requirements prescribed by the institute including no dues form.

9.9 Provisional Degree

The institute shall issue "Provisional Degree" signed by Dean Academics to the outgoing students who, otherwise has completed all the requirements for award of degree.

9.10 Migration certificate

The institute shall issue "Migration certificate" signed by Registrar to the outgoing students, on his/her request.