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**AQAR Report data for A.Y. 2022-23**

**2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time bound and efficient**

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## R1. CREDIT SYSTEM AND MODE OF EVALUATION

### 1. Credit System and Mode of evaluation

All the courses in the University and affiliated colleges shall be credit based and the evaluation will be grade based. Credit based grading system is a systematic way of describing an educational programme by attaching credits to its components. The definition of credits may be based on different parameters, such as student workload, learning outcomes and contact hours.

It is a student-centric system based on the **student workload** required to achieve the objectives of a programme. It should facilitate academic recognition of the courses and mobility of the students.

Credits assignment is based on the principle that Credits can only be obtained after successful completion of the work required and appropriate assessment of the learning outcomes achieved.

**Student workload** consists of the time required to complete all prescribed learning activities such as attendance at lectures/practical, seminars, projects, etc. Credits are allocated to all the educational components of a study programme and indicate the quantity of work each component requires to achieve its specific objectives.

Evaluation is an important component of any teaching-learning process. The University gives emphasis on continuous evaluation with considerable freedom to the teacher in deciding the mode of evaluation of the students. The performance of the student is documented by a **grade** at the end of the semester. The grading scale ranks the students on a statistical basis. Therefore, statistical data on student performance in his/her class is a prerequisite for applying the grading system.

### 2. Course Credits

In general, a certain quantum of work measured in terms of **credits** is laid down as the requirement for a particular degree. The student acquires credits by passing courses every semester, the amount of credits associated with a course being dependent upon the number of hours of instruction per week in that course.

There are mainly two types of courses in the University - lecture courses and laboratory courses. Lecture courses consist of lecture (L) and tutorial (T) hours. Laboratory courses consist of practical (P) hours. As per the AICTE norms, the credit (C) for a course is dependent on the number of hours of instruction per week in that course, as given below:

- (1) 1h/week of lecture (L) or tutorial (T) = 1 credit
- (2) 2h/week of Practical's (P) = 1 credit
- (3) Credit (C) for a theory course = No. of hours of lectures per week + No. of hours of tutorials per week = L + T
- (4) Credits (C) for a Laboratory course =  $\frac{1}{2}$  x No. of hours of laboratory course per week

Credits will be assigned to Industrial Training, Seminar, Projects and other mandatory course requirements also and these will be mentioned in the respective syllabi. There may be some non-credit requirements. A student is required to earn credits as mentioned in the syllabus.

### 3. Evaluation

3.1 The weightages of different modes of assessments shall be as under.

In-Semester evaluation				Components of continuous mode
	Continuous mode(CA)	Mid Semester Exam	End-Semester-Exam	
Theory	20%	20%	60%	Quizzes, class tests (open or closed book but minimum 2 in the semester if only mode of CA), home assignments, group assignments, <i>viva-voce</i> discussions
Practical's	60%	-	40%	Attendance, completion of experiments <i>viva -voce</i> , journal submission, assignments, project, experiments, announced tests

#### 3.2. In-Semester Evaluation

- It is expected that the teacher would conduct at least two formal assessments of the students under the continuous assessment mode in a Semester.
- The teacher will announce at the beginning of the respective course the method of conducting the assessments under the continuous mode and the assignment of marks and inform the same to the Director- Academics or Dean in University or Principal/HoD in affiliated college in the first week of the semester. The same may be also displayed on the University/ College Portal.
- The teacher shall keep the record of the continuous assessment of a class at least for three years and produce it to the Principal of the college or Director-Academics, if needed.
- In-semester performance of all students, both continuous assessment and mid-semester examination should be displayed on notice board as well on College / University Portal and sent to the academic office of the University/ College by the teacher before the end-semester examination.
- For the theory courses, there will be one Mid-semester test for each course to be held as per the schedule fixed in the Academic Calendar of the University/college, preferably in the eighth week of the semester
- A candidate who has not appeared for the in-semester continuous tests and/or mid-term examination in one or more subjects shall be considered to have not completed the course and will have to re-register for the respective subjects/course in the following year.

#### 3.3. End-Semester examination

The semester end examination will cover the full syllabus of the course and will be conducted as per the University time table at the end of each semester.

### 3.4 Passes and Fail

(revised as per the Item 8 of the Minutes of the Academic Council Meeting held on 19<sup>th</sup> August 2017)

- (a) The candidates who obtain 40% and more marks in a subject head of the end semester examination **AND** 40% or more of the total marks of a subject head shall be deemed to have **passed** the respective subject head.
- (b) The candidates who obtain less than 40% of marks in a subject head of the end semester examination and less than 40% the total marks of a subject head shall be deemed to have **failed** in the respective subject head (**Grade FF**).

### 3.5 Grades

- (a) The performance of a student shall be documented by a **Letter grade**. Each letter grade has a **Grade point** associated with it. The Grades and Grade points shall be assigned to each head of passing and both will be indicated in the mark-list of the semester examination.
- (b) A teacher shall assign absolute marks to all the in-semester tests and the end-semester tests for the respective subject head. The teacher shall collate the marks in the mid-semester and continuous mode examinations, convert them to prescribed 20% and 20% mark, respectively and submit the same to the office.
- (c) The total marks (continuous assessment + mid-semester + end-semester) of a candidate in a subject head are converted into a letter grade, based on the relative performance of the student in the class taking examination in the subject. The performance of the students who have passed the said subject shall be considered for the allotment of the relative grade on statistical basis.

<b>Letter Grade</b>	<b>Grade Point</b>
<b>EX</b>	<b>10</b>
AA	9.5
AB	9
BB	8.5
BC	8.0
CC	7.5
CD	7
DD	6.5
DE	6.0
EE	5

- (d) The grades to be allotted in the case of students who fail or do not appear at the end-semester examination shall be as under

<b>Letter Grade</b>	<b>Grade Point</b>	<b>Explanation</b>
FF	0	The candidate fails in subject head. The candidate will be allowed to take end-semester repeat or subsequent examinations as per rule.

XX	0	(i) The candidate has not kept term for the subject head due to attendance less than requisite 75%. (ii) The in-semester performance of the candidate is very poor. Further see 7.3.5(g) In the above cases, the candidate has to repeat the respective course by paying the fees in the following year
I	0	The candidate has kept term for the subject head, has taken all the internal examinations with satisfactory performance, but has failed to take the end-semester examination due to genuine reasons. The candidate will be allowed to take subsequent examinations as per rule
FR	0	The candidate has exhausted all the permissible chances to clear the end-semester examinations. The candidate has to register for the respective semester again for all the subject heads or will be out of the respective degree course as per the rules.
DR	0	(i) The candidate hasn't participated in academic programme. (ii) The candidate has taken a drop for the subject head;- provided he/she intimates the same (i or ii) at least 7 days in advance of the commencement of the end-semester examination for the respective year.

- (e) Grades **FF** and **I** are place-holders only and do not enter into CGPI/SGPI calculations directly. These grades get converted to one of the regular grades after the end-semester examination.
- (f) A candidate with an **FR** grade has appeared for maximum number of permissible six end semester examinations and has to re-register for that course by paying the appropriate fees.
- (g) **I** grade will not be continued beyond the permissible number of six consecutive end semester examinations, irrespective of whether the candidate fails to take any of these exams.
- (h) '**XX**' Grade: The grade **XX** in a course is awarded if – (i) a candidate does not maintain the minimum 75% attendance in the Lecture/Tutorial/Practical classes, (ii) the student has bad or incomplete in-semester records, for example, a candidate missing all internal tests and mid-semester examination, etc., (iii) a candidate indulges in a misconduct/uses unfair means in the examination, assignments, etc., of a nature serious enough to invite disciplinary action in the opinion of the teacher.  
(Note: Award of the **XX** grade in the case of g(iii) above shall be done by Disciplinary Action Committee (DAC)).
- (i) The names/roll numbers of students to be awarded the **XX** grade should be communicated by the teacher to the Academic office as per academic calendar before the last date of submission of the application for end-semester examination.

### 3.6. Awarding the grades

- (1) The grading scale ranks the students on a statistical basis on the basis of the overall performance of the students of a given class in the given subject head. Therefore,

statistical data on students' performance is a prerequisite for applying the grading system. While assigning grades in a given subject head, it is essential to know the **average marks (AM)** obtained by the students who have passed the subject head and the **highest marks (HM)** obtained in the same subject head.

- (a) **EX** Grade shall be awarded to the candidate(s) who scored highest mark (**HM**) in the concerned subject head provided the marks obtained are 80% or higher in the given subject head.
  - (b) If the **average marks (AM)** obtained by the students who have passed the subject head is <60%, the interval AM shall be awarded grade CD and the other grades shall be decided as follows.
  - (c) AA, AB, BB, BC and CC grades shall be decided between the AM and HM by dividing the range in equal intervals.
  - (d) CD, DD, DE and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.
- (2) If the **average marks (AM)** obtained by the students who have passed the subject head is such that  $60\% \leq AM < 70\%$ , the interval AM shall be awarded grade CC and the other grades shall be decided as follows:
- (a) AA, AB, BB grades shall be decided between the AM and HM by dividing the range in equal intervals.
  - (b) CC, CD, DD, DE and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.
- (3) If the **average marks (AM)** obtained by the students who have passed the subject head is  $\geq 70\%$ , the interval AM shall be awarded grade BB and the other grades shall be decided as follows:
- (a) AA, AB and BB grades shall be decided between the AM and HM by dividing the range in equal intervals.
  - (b) BC, CC, CD, DD, DE and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.
- (4) Illustration of award of different grades are explained in the following examples:
- i) Example 1: HM = 92, AM = 76  
Hence,  $I_L = (76-40)/6 = 6$ ,  $I_U = (92-76)/3 = 5.33 \approx 5$
  - ii) Example 2: HM = 84, AM = 62  
Hence,  $I_L = (62-40)/5 = 4.4 \approx 4$ ,  $I_U = (84-62)/4 = 5.5 \approx 6$

Marks distribution for different grades:

Sr. No.	Letter Grade	Example 1 (HM=92, AM= 76, $I_L = 6, I_U = 5$ )	Example 2 (HM=84, AM= 62, $I_L = 4, I_U = 6$ )
1	EE	40 to 45	40 to 43
2	DE	46 to 51	44 to 45
3	DD	52 to 57	48 to 50
4	CD	58 to 63	52 to 55
5	CC	64 to 69	56 to 62
6	BC	70 to 76	63 to 68
7	BB	77 to 81	69 to 74
8	AB	82 to 86	75 to 80



9	AA	87 to 91	81 to 83
10	EX	92	84

#### 4. Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

##### (a) Semester Grade Point Average (SGPA)

The performance of a student in a semester is indicated by Semester Grade Point Average (SGPA) which is a weighted average of the grade points obtained in all the courses taken by the student in the semester and scaled to a maximum of 10. (SGPI is to be calculated upto two decimal places). A Semester Grade Point Average (SGPA) will be computed for each semester as follows:

$$SGPA = \frac{\left( \sum_{i=1}^n c_i g_i \right)}{\left( \sum_{i=1}^n c_i \right)}$$

Where

'n' is the number of subjects for the semester,

'c<sub>i</sub>' is the number of credits allotted to a particular subject, and

'g<sub>i</sub>' is the grade-points awarded to the student for the subject based on his performance as per the above table.

SGPA will be rounded off to the second place of decimal and recorded as such.

##### (b) Cumulative Grade Point Average (CGPA):

An up to date assessment of the overall performance of a student from the time he entered the Institute is obtained by calculating Cumulative Grade Point Average (CGPA) of a student. The CGPA is weighted average of the grade points obtained in all the courses registered by the student since s/he entered the Institute. CGPA is also calculated at the end of every semester (upto two decimal places). Starting from the first semester at the end of each semester (S), a Cumulative Grade Point Average (CGPA) will be computed as follows:

$$CGPA = \frac{\left( \sum_{i=1}^m c_i g_i \right)}{\left( \sum_{i=1}^m c_i \right)}$$

Where

'm' is the total number of subjects from the first semester onwards up to and including the semester S,

'c<sub>i</sub>' is the number of credits allotted to a particular subject, and

'g<sub>i</sub>' is the grade-points awarded to the student for the subject based on his/her performance as per the above table.

CGPA will be rounded off to the second place of decimal and recorded as such.

(c) The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester / beginning of the next semester.

- (d) When a student gets the grade 'FF', or I' in any subject head during a semester, the SGPA and CGPA from that semester onwards will be tentatively calculated, taking only 'zero' grade point for each such 'FF' or 'I' grade. When the 'FF' grade(s) has / have been substituted by better grades after the repeat examination or subsequent semester examination, the SGPA and CGPA will be recomputed and recorded.

### **5. Supplementary End-Semester Examination**

*(revised as per the item 7 of Minutes of the Academic Council meeting held on 19<sup>th</sup> August 2017)*

- (1) For those candidates who fail in a subject head or are eligible for appearing at the repeat examination, **A Supplementary End-Semester Examination of odd semester will be conducted before the regular End semester examination of the even semester.**

- (2) **A Supplementary End-Semester Examination of even semester will be conducted before the regular End semester examination of the odd semester.**

- (3) The marks obtained by candidates in the in-semester examinations (continuous assessment and mid-term examination) will be carried forward in such cases.

- (4) **Grading the performance in the Supplementary Examination:**

The grades will be assigned as per 3.5 and 3.6 above.

- (5) **Revaluation of end-semester and Supplementary examination:**

Candidate's performance in these examinations will be announced on web portal of the University and after one month of such announcement the grade statements will be sent to the concerned Department for distribution to the students. Those who want to get the photocopy of their answer books are required to pay the requisite fee. Revaluation of these examinations shall be allowed. Those who would like to have the revaluation of their answer books are required to pay a requisite fee.

- (6) **Remedial examination**

The candidate will have an option of appearing for an Online Remedial Examination, after the declaration of each End-semester examination results, to pass the subject head where he/she has failed in regular end-semester examination of the semester. The candidate will get only EE grade if he clears the remedial examination and can continue with the next semester. However, for improving his grade in the same subject head, the candidate will have an option of appearing in the 'same' subject in the Supplementary Examination before the regular end-Semester examination.

### **6. Passing of a Semester Examination**

A candidate shall be declared as '**PASSED**' any semester examination if he/she has

- (a) Cleared all heads of passing by securing grades EE or higher in all the heads;
- (b) Passed all the heads of passing such as project, seminar, training, etc as per the rules;
- (c) Satisfactorily completed all the mandatory requirements of the course;
- (d) paid all the University/college dues;
- (e) No case of indiscipline pending against him/her.

### **7. Eligibility for the Award of a Degree**

A candidate shall be declared eligible for the award of a degree, if he/she has cleared all the semester examinations as given in (6) above.

### **8. Allowed to keep terms (ATKT)**

- (1) A candidate who has II grade in one or more heads of passing of an odd semester of an academic year shall be allowed to keep terms for the respective even semester.
- (2) A candidate (other than those specified in 6) shall be allowed to keep terms for the subsequent academic year as per the following:
  - (a) At the end of 1<sup>st</sup> year a candidate shall be allowed to keep terms (ATKT) to 2<sup>nd</sup> year of study provided he/she attends course work prescribed for 1<sup>st</sup> year with prescribed attendance and successfully cleared at least 60% of the total credits specified for 1<sup>st</sup> year program.
  - (b) At the end of 2<sup>nd</sup> year a candidate shall be allowed to keep terms to 3<sup>rd</sup> year of study provided he/she attends course work prescribed for 2<sup>nd</sup> year with prescribed attendance, and successfully cleared 1<sup>st</sup> year program and at least 60% of total credits prescribed for 2<sup>nd</sup> year program.
  - (c) At the end of 3<sup>rd</sup> year a candidate shall be allowed to keep terms to final year of study provided he/she attends course work prescribed for 3<sup>rd</sup> year with prescribed attendance, and should have completed 2<sup>nd</sup> year program and 60% of total credits prescribed for 3<sup>rd</sup> year program.

All such candidates fulfilling the above criteria shall be declared as **FAILED, ATKT**

### **9. Repeating a course**

- 1) A student is required to repeat the course of a subject head under the following situations:
  - (a) A student who gets an **XX, FR, or DR** grade in a course; or
  - (b) A student has exhausted all permissible chances to clear the subject head.
- 2) A candidate from second, third and fourth years who remains absent for the regular end-semester examination of a semester and the corresponding repeat examination for **ALL SUBJECTS** shall have to take fresh admission for the corresponding year; unless the candidate has dropped out / terminated from the course.
- 3) If a candidate at the Second, Third or Fourth year fails to pass any semester examination in not more than 6 consecutive examinations, including the supplementary examinations, from the date of registering for the respective year, the candidate shall have to take readmission for the corresponding year again in which the failure has occurred, provided the course is not changed.

### **10. Improvement of performance**

If any student is failed to secure First Class at the end of B.Tech. Programme then he/she may be allowed to improve the class by Re-registering some of the courses he/she studied during Second year to Final year of B.Tech. Programme. In case there is, no improvement in performance the previous result will be retained.

### **11. Early exit for poorly performing students**

A candidate shall be excluded from a course under the following conditions:

- (a) If he/she fails to pass any semester examination of the first year of the course in not more than six consecutive attempts from the date of joining the course, including the repeat examinations.
- (b) If he/she has five or more **XX** and/or **FR** grades after the first regular end-semester examination of the First year, due after taking the admission, and the corresponding repeat examination.

- (c) If he/she has not kept a term at the First year of the course without giving any reasonable justification for doing so.
- (d) If he/she does not keep two consecutive terms without giving any reasonable justification for doing so.
- (e) If a candidate fails to fulfill all the requirements of his/her respective degree within the prescribed period from the date of taking admission to the course, the candidate shall be excluded from the course.

## 12. Award of Class

The candidates who successfully complete all course/curriculum requirements of B.Tech Programs shall be awarded class as specified below.

- (a) Those who score CGPA of 8.25 and above shall be awarded First Class with Distinction.
- (b) Those who score CGPA of 6.50 and above but below 8.00 shall be awarded First Class.
- (c) Those who score CGPA below 6.50 shall be awarded Second Class.

Following will be the equivalent percentage of CGPA on Ten Point Scale:

The formula used to convert CGPA to percentage is:

$$\text{Percentage of Marks} = (\text{CGPA} - 0.5) \times 10.$$

Cumulative Grade Point Average (CGPA)	Equivalent Percentage of Marks
6.00	55.0
6.25	57.5
6.50	60
7.25	67.5
7.75	72.5
8.25	77.5

## 13. Miscellaneous

- (a) Although CGPA will be given in the Semester grade report, the final degree certificate will not mention any Class whatsoever.
- (b) Notwithstanding anything said above if a course is revised /restructured then transient provisions applicable at the time of revision /restructuring shall be applicable.

## **R2-RULES FOR CONTINUOUS INTERNAL ASSESSMENT**

1. For each theory course there is an internal weight-age of 20 marks out for 100 for continuous assessment for each practical course the continuous assessment is for 60 marks out of 100. The course assessment process is a type of assessment conducted in multiple sections of a given course. Depending upon the course outcomes, teacher can use various tools for effective assessment of the student's learning and attainment of his/her course outcomes.
  2. Teacher should fix up the % for each or some of the following effective tools for assessing the learning curve of the students.
  3. All these tools assessment needs to be planned and executed in accordance with examination schedule of the department.
  4. The method of Continuous Assessment must be announced by the Teacher right at the beginning of the course in the class and put up on Notice Board. It may be communicated to the Examination Section.
  5. One or more of the following methods can be used for continuous assessment with a record.
    - (i) Online Objective Type Examination (Google Form in scrambled format)
    - (ii) Assignments
    - (iii) Mini projects
    - (iv) Research Paper Analysis and Presentation
    - (v) Quiz and Technical Puzzles
    - (vi) Surprise Test
    - (vii) Oral presentations/Seminar
    - (viii) % Attendance
    - (ix) Innovative approach to problem solving
- (i) Online Objective Type Examination (Google Form/ Similar online platform)**  
It is expected to conduct the online objective examination(s) based on course contents. Questions in the examinations should be in line with questions of competitive examinations such as GATE/ ISRO/ BHEL etc.  
Based on the course contents number of online examinations in the semester as well as % weightage should be declared well before the commencement of academic sessions.
- (ii) Assignments**  
Assignment(s) should be correlated with the respective course outcomes. It is expected that teacher should provide online platform for submission of these assignments within the given time frame. The information about percentage of marks allotted to assignments must be known to the students well in advance.
- (iii) Mini-project**  
The course outcomes involving the design and development of a product related to the respective course should be allotted to each student or group of students. It is expected to record the regular progress of the aforesaid work in the separate log book for assessment purpose. Through this activity it may be possible to achieve and promote skill development and technology transfer.
- (iv) Research Paper Presentation:**  
It is expected that course coordinator should address and motivate the students on research and innovation activities related to respective course. The teacher must invite and encourage the students to showcase their research talent and/or innovative ideas through presentation.

**(v) Quiz and Technical Puzzles**

To judge analytical and logical reasoning ability of the student, it is expected to conduct various quizzes and technical puzzles to cover the course outcomes. Students should also be motivated to frame and present technical puzzles so as to promote new learning pedagogies.

**(vi) Surprise Test**

Remembering and understanding abilities of the student in the respective course should be tested by offering/ conducting appropriate no. of surprise tests in the class room.

**(vii) Oral presentations/Seminar**

Teacher must provide the platform to the students to showcase their skills such as technical, communication and presentation etc. This platform helps the students to improve their confidence level and overall personality development in all sense.

**(viii) Innovative approach to problem solving**

To inculcate and promote the research culture among the students, teacher should encourage and motivate the students to present their innovative ways/ideas of attempting the problems related to course. It is expected to initiate this kind of activity at higher level that is during third / final year of the course.

It is expected that teacher keeps an up-to-date record of the continuous assessment and produce it at the time of academic audit or accreditation.

6. The teacher shall submit the Internal Continuous Assessment marks to the examination section before registration date for the end semester examination.
7. The Teacher shall display the Internal Continuous Assessment marks on the Notice Board.

## **R3-FOR ADMISSION, MONITORING AND AWARD OF DEGREE OF DOCTOR OF PHILOSOPHY (PH. D.) AND MASTER DEGREE**

### **R.3.1. ADMISSION, MONITORING AND AWARD OF DEGREE OF DOCTOR OF PHILOSOPHY (PH. D.)**

Dr. Babasaheb Ambedkar Technological University will offer full-time and part-time programs for the Degree of Doctor of Philosophy in the academic disciplines of Chemical Engineering, Petrochemical Engineering, Civil Engineering, Computer Engineering and Information Technology, Electrical Engineering, Electronics and Telecommunication Engineering, Mechanical Engineering, Biotechnology and Biomedical Engineering under the faculty of Engineering and Technology, Pharmacy under the faculty of Pharmacy, Architecture under the faculty of Architecture, Hotel Management under the faculty of Management and in the academic disciplines of Chemistry, Biotechnology, Earth Sciences, Health Science, Mathematics, and Marine Sciences and Physics under the faculty of Sciences.

These rules and regulations shall also be applicable for any new Ph. D. programs introduced by the University from time-to-time.

#### **1. Eligibility**

- (1) The candidates applying for Ph. D. Programs in all Engineering disciplines should have passed M. E. /M. Tech. or equivalent degree in relevant discipline with minimum 60% of marks (55% in case of reserved category candidates from the State of Maharashtra only) awarded by any recognized University/Institute.
- (2) The candidates applying for Ph.D. program in Pharmacy should have passed M. Pharm. or equivalent degree in the relevant subject with minimum 60% of marks (55% in case of reserved category candidates from the State of Maharashtra only) awarded by any recognized University/Institute.
- (3) The candidates applying for Ph.D. program in Architecture should have passed M. Arch. or equivalent degree in the relevant subject with minimum 60% of marks (55% in case of reserved category candidates from the State of Maharashtra only) awarded by any recognized University/Institute.
- (4) The candidates applying for Ph.D. program in Hotel Management and Catering Technology should have passed M. HMCT. or equivalent degree in the relevant subject with minimum 60% of marks (55% in case of reserved category candidates from the State of Maharashtra only) awarded by any recognized University/Institute.
- (5) The candidates applying for Physics, Chemistry and Mathematics should have passed M. Sc. or equivalent degree in the relevant subject with minimum 60% of marks (55% in case of reserved category candidates from the State of Maharashtra only) awarded by any recognized University/Institute.
- (6) The candidates applying for Humanities should have passed M. A. or equivalent degree in the relevant subject with minimum 55% of marks, 50% in case of reserved category candidates from the State of Maharashtra only awarded by any recognized University/Institute.

#### **2. Admission Process**

- (1) The admission of the candidates for Ph. D will be on the basis of entrance test and interview. All candidates will have to appear for entrance test as well as interview for becoming eligible for admission. The employed candidates applying for full-time and

part-time programs for the Degree of Doctor of Philosophy will have to submit No Objection Certificate from their employer in the prescribed format (*Annexure – II and III*).

- (2) A candidate seeking admission to the Ph. D. degree program shall apply on-line on the portal of Dr. Babasaheb Ambedkar Technological University, in the prescribed application form on or before 15th July, or 15th January for admission respectively for the session starting from the following 16th August or 16th February of every academic year subject to availability of sufficient number of vacancies.
- (3) The link for on-line application will be activated on 10th June and 10th December every year. Brief admission notification will be published in the newspaper(s). Further necessary instructions to the candidates will be made available on the portal as soon as the link for on-line application is activated.
- (4) A predetermined and manageable number of vacancies for Ph. D. programs in the respective academic sessions depending on number of the available eligible Faculty Guides (Guides) and the vacancies offered will be displayed on the portal.
- (5) The affiliated Institutes and recognized Institutes shall also display their requirements on their website.
- (6) Entrance Examination is mandatory for the candidates seeking admission to the Ph. D. degree in University Departments and affiliated Colleges. The Entrance Examination will be conducted by the University on the First Saturday of the month of August and February every year.
- (7) Candidates will be able to download and print their Hall Tickets for the Entrance Examination from the portal after the 25<sup>th</sup> July or 25<sup>th</sup> January of every academic year. Candidates must bring their Hall Tickets at the time of Entrance Examination.
- (8) There may be change in the dates mentioned above on account of some unavoidable circumstances/reason(s). The change in the schedule will be declared by the University through admission notification/circular on the admission portal.

### **3. Structure of the Entrance Examination**

- (1) The Entrance Examination will be conducted in two parts; General Aptitude Test and Subject Specific Test.
- (2) **Paper-I: General Aptitude Test (100 Marks)**  
This Paper will have 40 Multiple Choice Questions (MCQs) of 2 Marks each covering Verbal Ability, Numerical Ability, and Reasoning Ability (total 80 Marks) and 5 General Descriptive Questions of 4 Marks each designed to test the candidates Motivation, Idea, Vision and Expectations (total 20 Marks).  
**Verbal Ability:** To measure degree of comfort with the English Language,  
**Numerical Ability:** To test fluency or comfort with Numbers and Calculations,  
**Reasoning Ability:** To measure ability to understand and grasp relationships between concepts.
- (3) Candidate who scores 50 % marks and above (45 % marks and above, in case of all Backward Class, Physically Handicapped candidates) in **General Aptitude Test** (Paper – I) will be declared qualified.
- (4) The list of qualified candidates (Paper – I) will be displayed on the portal on the day after the test.
- (5) **Paper-II: Subject Specific Test (100 Marks), on the following day**  
The syllabus of Paper-II for various subjects covered under different branches will be the syllabus of GATE examination of the respective branch of Engineering and/or and GATE/SET/NET/JRF for Sciences. This Paper will have 40 Multiple Choice Objective



Questions (MCQs) of 2 Marks each (80 Marks) covering relevant subjects in the respective branch of Engineering or Sciences and 5 Descriptive Questions of 4 Marks each designed to test the candidate's knowledge of the Core Subjects in the relevant branch of Engineering and Technology or Sciences (20 Marks).

This Examination will be conducted by respective University Departments and affiliated colleges

(6) Candidate who scores 50 % marks and above (45 % marks and above, in case of all Backward Class, Physically Handicapped candidates) in **Subject Specific Test** (Paper – II) will be declared qualified.

**(7) Interview**

Only the candidates who have qualified General Aptitude Test (Paper–I) and Subject Specific Test (Paper–II) can appear for an interview to be organized by the respective Departments. The Interview Committee shall consist of the following members

- (i) Head of the Department, Chairman
- (ii) One Senior faculty member of the Department
- (iii) One representative of the reserved category nominated by Vice-Chancellor from the faculty of the University
- (iv) Two external experts, nominated by Vice-Chancellor

(8) At the time of interview, prospective candidates are expected to discuss their research interest/area. In the Interview the candidate can score maximum 50 marks.

(9) The list of candidates found eligible based on their performance in entrance test and interview for the offer of Ph. D. admission will be displayed in the order of GENERAL MERIT on the admission portal of the University.

(10) The University may periodically review and incorporate some changes in the structure of the entrance examination in future which will be notified by the University at the time of admission notification.

4. The University will follow the rules of the reservation policy of Government of Maharashtra while granting admissions.

**5. Scholarship/Fellowship**

Candidates opting for full-time program can apply for scholarship to various funding agencies such as UGC/DST/AICTE/State Govt. etc.

**6. Fees to be paid by the Ph. D. Candidate**

All candidates admitted for Ph. D. program will have to pay the fees notified by the University from time-to-time. This includes annual fees and one-time thesis processing fees to be paid at the time of submission of thesis.

**7. Leave**

(1) The full-time candidates are not eligible for vacation. However, they are eligible to take leave (including duty leave) up to 30 days in the calendar year subject to approval of the Head of the Department on the recommendation of the Guide.

(2) The candidates can avail duty leave for attending conferences/workshops training programs with prior approval of the Head of the Department on the recommendation of the Guide. (*ANNEXURE – IV*)

(3) Women candidate is eligible for maternity leave of three months with the approval of the Head of the Department on the recommendation of the Guide. The leave extendable by another maximum three months

(4) If the proposed research work requires field visits, then the candidate may be permitted field visits for maximum period of six months with an approval of the Research Committee. The leave record of the candidates shall be maintained by the concerned Research Guide.

## **8. Research Committee**

- (1) There shall be a Research Committee for each discipline consisting of the following members:
  - a) Chairman, Board of Studies in the subject concerned (Chairman)
  - b) Head of the Department in the subject concerned. If he is the Chairman of the Board of the Studies, then senior most professor in the discipline of University shall be the member of the Committee
  - c) One Professor in the subject concerned, to be nominated by the Vice chancellor, by rotation for a period of two years.
  - d) One Associate Professor in the subject/area concerned nominated by the Vice-Chancellor/ Academic Council for a period of two years by rotation.
  - e) One Assistant Professor, if he has earned PhD in the subject area, nominated by Vice-Chancellor /Academic Council, for a period of two years by rotation
  - f) A panel of minimum five subject experts nominated by the Academic Council for a period of three years, at least one of them must be present for the meeting
- (2) In absence of the Chairman, senior most member present in the meeting will act as Chairman.
- (3) The Quorum of the Committee will be three members, of which one should be an external expert. If any nominated member does not attend three consecutive meetings, his membership will be cancelled. The additional members can be included by approval of Vice-Chancellor.
- (4) The research committee shall review the progress reports submitted by the PhD candidates through their guides and Research Progress Committee.
- (5) The Research Committee shall review the titles, synopsis of theses and decide the examiners for thesis evaluation of PhD and Masters' theses.

## **9. Allocation of Research Guide (Ph. D. Guide)**

- a. The allocation of the guide for a selected candidate will be decided by the Department in a formal manner depending on the number of vacancies available per research guide, the available specialization among the research guides, and the research interest of the candidate as indicated during interview by the candidate.
- b. A candidate having near relation (such as husband, wife, son, daughter, father, mother, brother, sister, uncle, aunt, nephew, niece, brother-in-law, sister-in-law, first cousin) with any research guide will not be allotted to him/her in any case.
- c. Any research guide shall not have more than eight research candidates from the University registered with him at any time.
- d. Normally a candidate shall be required to complete his/her doctoral research under the supervision of allotted (original) approved guide. However, the concerned research committee may allow change of guide on the production of a "No Objection Certificate" from the original guide and an acceptance letter from the new guide. In case of such a change, the candidate shall work for a minimum period of one calendar year under the new guide before he/she submits the thesis. The requirement of "No Objection Certificate" shall not be necessary if the candidate justifies the non-availability of his original guide. The justification will have to be endorsed by the respective Head of the Department.
- e. Provided further that, in specific cases additional supervisor/s shall also be permitted for justified reasons. The decision of the research committee will be final.

- f. A candidate may be allotted additional supervisor/s at a later stage (depending on the necessity to do so) who is a recognized research guide in the same area. In case of additional supervisor, the quota of the supervisors shall be considered as affected by 0.5 from his/her available quota.
- g. Provided that the subject matter of research concerns with two different specializations of the same subject within the same Department and/or the subject matter of the research is of an interdisciplinary nature concerning two different Departments in the University. Both the guides will have the equal status.
- h. In case of resignation or retirement of a research guide the candidate will be allowed to opt for another recognized guide in his/her the subject of research. However, if the candidate is willing to continue his/her research work with the same research guide and the research guide is willing to guide him from his new place of work/home he will be allowed to do so with approval of the Executive Council on recommendation of the Academic Council.
- i. In case of sad demise of a research guide, the candidate will be allowed to opt for another recognized research guide in his/her subject of research. He will have to apply to the Registrar for obtaining such permission of the Executive Council on recommendation of the Academic Council.

## 10. Place of Research

- (1) The candidates admitted for the full time Ph. D. programs will have to work within the premises of the University under the supervision of an allotted research guide who will maintain the log book of experimental/computational work done by the full time Ph. D. candidates. The Heads of the respective Departments will regularly check whether log books are properly maintained.
- (2) Normally, a candidate admitted for the part time Ph. D. programs will also have to work within the premises of the University under the supervision of an allotted research guide who will maintain the log book of his/her visits and the experimental/computational work done by the part time Ph. D. candidates. The Heads of the respective Departments will regularly check whether log books are properly maintained. However, in case, a part time candidate desires to work at any other “recognized” research Institution or Department, the same may be allowed, at the discretion of the respective Research Committee. Here, the term “recognized” means CSIR Laboratories and the respective Departments, Colleges and Institutes recognized by the respective affiliating State Universities to which the said Department, College or Institutes is affiliated. If the place of the work is not recognized by any University, then the Academic Council shall appoint the sub-committee of three subject experts to visit the place of research to verify the suitability of the place for conduction of research work.
- (3) The sub-committee will visit the place of research and submit its report to the Academic Council through research committee to decide about recognition of the place of research. The decision of the Academic Council will be final. (**ANNEXURE – V**)
- (4) All the full-time and part-time candidates admitted for Ph. D. programs will be given similar facilities including the University Library and respective Departmental Laboratories. The use of the Laboratories from other Departments shall be permitted to with the permission of the respective Heads of the Department. A formal request in this regard shall be made by the candidate with the approval of Heads of the Department of his/her parent Department.

## 11. Provisional Registration of the Ph. D. Candidates

- (1) All the candidates admitted for Ph. D. programs shall deem to be provisionally registered and the provisional registration numbers and passwords will be allotted to them on completion of admission process in the respective academic session. The further process will be monitored through the portal. The candidates will have to upload the desired information on the portal, as per the announcements displayed on the portal and the information sent to them via e-mail from time to time.
- (2) All the provisionally registered candidates shall prepare a synopsis of proposed research work along with the title **within 18 months** from date of issue of provisional registration numbers and must upload a copy of the same duly signed by his/her research guide (*pdf* format) and endorsed by respective Head of the Department on the portal.
- (3) These proposals will be scrutinized by the respective research committees in the concerned subject which shall recommend to the Academic Council as to whether the proposed research title of the Ph. D. thesis be approved.
- (4) On approval of the Academic Council the final letter will be issued by the Controller of Examinations to the candidate, copy of which will be sent to the research guide and the respective Heads of the Departments. The candidate must upload the same copy (*pdf* format) on the portal.
- (5) In case of non-confirmation of the title and synopsis by Academic Council the candidate will be asked to submit revised title/synopsis **within three months** from the receipt of such communication from Controller of Examinations. Such proposal will be scrutinized by the respective research committee in the concerned subject which shall recommend to the Academic Council as to whether the proposed research title of the Ph. D. thesis be approved. The decision of the Academic Council will be final.

## 12. Allotment of Course Work

- (1) The candidates will have to complete mandatory Pre-Ph. D. course work as mentioned in following sub-sections within four semesters of which the first semester must be full time course work at the University.
- (2) After the allotment of provisional registration numbers and passwords all the candidates will be allotted theory course of minimum six credits (three contact hours per week) by the respective research committees on the recommendation of his/her research guide within a period of six months.
- (3) If suitable courses are not available in the University curricula for a particular candidate, the concerned research committee will design special course(s) and get them approved from Board of Studies and Academic Council of the University.
- (4) The University will try to provide instructional facilities for such courses. In case it is not possible to provide instructional facility, Ph. D. candidate will have to undergo such course(s) in self study mode. (*ANNEXURE – VI*)
- (5) All the candidates will have to appear for an additional mandatory course work of minimum six credits (three contact hours per week) which will include topics on research methodology, quantitative methods of computer application, seminars, review of published research work in the proposed/planned field of his/her research. The planning, conduct and evaluation of this course work shall be done by the respective research guide. Completion report of this course work and the grade awarded shall be submitted by the respective research guide to respective research committee for its approval. A copy of completion report along with the grade awarded shall be then forwarded by the Chairman, Research Committee to Controller of Examinations.

- (6) The candidates will also have to submit a seminar report and present the same as open seminar at the Department Level. The seminar will be of four credits.
- (7) The candidate will have to secure CGPA of at least 6.0 in the course work, failing which the admission and the provisional registration of the candidate will stand cancelled.
- (8) The candidates must complete abovementioned coursework within two years from the date of provisional registration. The registration of the candidates for Ph. D. degree shall be considered as provisional till he/she successfully completes the pre-Ph. D. course work. The candidate must upload the copies of his/her grade report(s) (*pdf* format) on the portal.
- (9) On successful completion of the same within two years his/her provisional registration, Controller of Examinations will issue a letter of confirmation of his/her Ph. D. registration to the candidate.
- (10) However, in case the candidate fails to successfully complete the same within two years his/her provisional registration will stand cancelled and his/her Ph. D. program will be terminated at that stage without any notice. However, on recommendation of the concerned research committee, the delay in completion of course work on account of some unforeseen reason/s (**maximum period up to 6 months**) can be condoned by the Academic Council.
- (11) The period of provisional registration will be counted for the continued Ph. D. registration. Successful completion of all pre-Ph. D. course work shall be a mandatory pre-requisite for the submission thesis for Ph. D. degree.
- (12) Exemption from Attendance: Only part-time Ph. D. candidates working in recognized research institutions/laboratories, Government R and D and Design organizations, teachers working in the University Departments / AICTE recognized institutions may be exempted from the physical attendance of theory course lectures at the discretion of the concerned research committee. However there is mandatory requirement of completion of course completion and Research Committee shall provide guidelines for course work

### **13. Tenure of Registration**

- (1) The registration of the candidate shall be valid and shall remain in force for a period of six years from the date of provisional registration and shall stand cancelled automatically on expiry of six years.
- (2) Two extensions up to maximum period of twelve months each shall be permissible in those cases which are recommended by the research guide and Head of the respective Department. The decision for extension shall be taken by the respective research committee and informed to the Registrar to place before the Academic Council for information. The application for extension is required to be submitted at least **three months** prior to the date of expiry of registration.
- (3) The maximum period of registration for the Ph. D. candidate shall be eight years, after which the registration shall stand cancelled.

### **14. Cancellation of Registration**

- (1) The candidate can opt for voluntary cancellation of Ph. D. registration on his/her own volition. In that event the application duly signed by the candidate and duly endorsed by his/her research guide and Head of the respective Department shall be submitted to the Controller of Examinations. The candidate shall personally appear before the Controller of Examination and shall submit a declaration of cancellation in his own hand writing. The Controller of Examination shall then endorse the declaration and forward the

application along with the declaration to the Academic Council through the Registrar. The said registration shall stand cancelled from the date of approval by the Academic Council.

- (2) If the candidate is found to guilty of commissions and omissions amounting to misconduct like indiscipline, dereliction of duties unbecoming behavior, insubordination, plagiarism, etc., any time during the course of his Ph. D. program his/her registration may be cancelled on the receipt of report submitted by his/her research guide and duly endorsed by the Head of the respective Department.
- (3) However, the Head of the respective Department before endorsement of such report brought before him by the research guide shall grant an opportunity to the candidate for submitting his explanation and shall conduct such enquiry as deemed necessary. Such cases shall be placed before the Academic Council whose decision will be final. Provided further that in the event the cancellation of registration such candidate who has received scholarship/ financial assistance from funding agencies like UGC, AICTE, CSIR, TEQIP, University Fund etc., the amount so received shall be recovered from the candidate.
- (4) In case of the involvement of the candidate in a criminal offence involving moral turpitude shall be treated to be a misconduct and his/her registration shall be cancelled with immediate effect on his/her conviction by the Competent Court.

#### **15. Submission of Biannual Progress Reports**

- (1) Each candidate shall submit biannual progress report duly signed by his/her research guide and the Head of the respective Department to the Controller of Examinations, in the last week of June and December every year.
- (2) The Controller of Examinations will endorse the copy of progress report as a token of receipt. This copy of progress report (*pdf* format) must be uploaded on the portal by the candidate on or before 30th June and 31st December every year.
- (3) If the candidate fails to submit his/her progress report in the prescribed format by 30th June and 31st December, he/she will not be able to upload the same on the portal. However, in case of genuine difficulty and a valid reason for failing to do so, he/she can approach the Controller of Examinations personally and request to upload the progress report on the portal. The dead line to do so will be 15th July and 15th January in the respective academic sessions. After this date even the Controller of Examinations will not be able to upload the same as this facility will be automatically locked by the system.
- (4) If the candidate fails to upload his/her progress report through Controller of Examinations by 15th July and 15th January in the respective academic sessions his case shall be referred to the Academic Council through Research Committee for further action and/or to decide about cancellation of his/her registration. The decision of the Academic Council in this regard will be final.

#### **16. Research Progress Committee**

The concerned guide of Ph. D. candidate will form a Research Progress Committee for every student consisting of him/herself, one more faculty member from the same Department who is PhD guide and one faculty member from other Department, from the University in the case of University Department or from the same College to regularly monitor the progress of the candidates.

The Candidate shall give a presentation and submit a report . (*ANNEXURE – VII*) to the Research Progress Committee every six months.

The guide will place the progress reports in the RC meeting who shall take decision of continuation of the candidate for the degree.

### **17 Change of Title of the Thesis**

- (1) The final title of the thesis can be submitted at least six months in advance of submission of the thesis on approval of the Research Committee.
- (2) The Ph. D. candidate may be allowed to change the title of his/her research work subject to approval Academic Council provided he/she applies for the change at least **three months** before the anticipated date of submission of his/her thesis or earlier. The candidate shall submit his/her application duly recommended by the guide, through concerned Head of the Department and Research Committee.
- (3) The Academic Council will approve the title of the thesis on recommendation of research committee if there is change in the topic of research.

### **18. Pre-synopsis Seminar**

- (1) Prior to the submission of thesis, the candidate shall make a pre-Ph. D. presentation (Pre-synopsis seminar before respective research committee) in the Department. The pre-synopsis seminar will be open to all faculty members and research candidates, for getting feedback and comments, which may be suitably incorporated into the draft thesis with the advice of the guide. (**ANNEXURE – VIII**)
- (2) The respective Head of the Department shall notify regarding the conduct of pre-synopsis seminar at least **two weeks** in advance with a copy to Controller of Examinations. All the faculty members, candidates and M. Tech candidates from all the Departments shall be invited to attend the Pre-synopsis Seminar.

### **19. Submission of the Thesis**

- (1) The candidate may submit his/her synopsis and thesis any time during the year, after the completion of minimum prescribed period of two years and one year after the successful completion of all pre-Ph. D. courses. A candidate shall submit to the Controller of Examinations eight copies of synopsis (about 2000 words) in order to start the processing of his/her thesis for the evaluation. The candidate must upload the copy of his/her synopsis (**pdf** format) on the portal.
- (2) The thesis can be submitted two months after the submission of synopsis but within six months of the submission of synopsis.
- (3) The candidate must have published at least one research paper (minimum) in RC approved or indexed in Scopus/Thomson Reuter/SCI peer reviewed/ refereed journals before the submission of the thesis for adjudication, and upload the evidence for the same in the form of acceptance letter or the reprint (**pdf** format) on the portal. The paper accepted for publication can also be considered towards fulfillment of this requirement.
- (4) The candidate must submit FOUR copies of his/her Ph. D. thesis along with prescribed Ph. D. thesis processing fees. The candidate must upload the copy of his/her Ph. D. thesis (**pdf** format) on the portal.
- (5) After the successful completion of his/her Ph. D. program one copy of the thesis shall be kept in the University Library, one in the respective Department and one copy shall be returned by the University to each of the candidate's research Guide/Co-Guide.
- (6) Guidelines for preparation of thesis: A candidate submitting thesis for the Ph. D. degree is required to follow the instructions regarding the size, style and binding of thesis. The

current guidelines are given in *ANNEXURE – I*. The University may review and make some changes in the guidelines.

- (7) While submitting the thesis the candidate shall indicate whether the work is based on discovery of new facts by the candidate or of new relations of facts observed by others and how the work leads to the general advancement of knowledge.
- (8) The candidates shall further forward a statement indicating the sources from which is information has been derived and the extent to which he/she has based his/her work on the work of others and shall indicate which portion or portions of his/ her thesis he/she claims to be original.
- (9) Where a candidate presents a joint work, he/she shall clearly state the portion which is his/her own contribution as distinguished from the portion contributed by his/her collaborator. This statement should be certified as correct by his/her research guide. The format of the certificate is given in the *ANNEXURE – IX and X*.
- (10) The research supervisor shall certify antiplagiarism check certificate from a University certified agency submitted by the candidate along with the thesis.

## **20. On-line Processing of the Theses**

- (1) The University has already prepared and will keep on updating a data bank containing name of the Ph. D. thesis examiners along with their specialization, research areas, affiliation, addresses etc.
- (2) The data bank will be continuously updated by the research guides. The data bank thus updated will be placed periodically before the Academic Council for its approval and subsequently before the Executive Council for its information.
- (3) The Ph. D. candidate who have been provided with provisional registration number and password and have uploaded on the portal, their grade sheets of the allotted pre-Ph. D. course work including seminar, all biannual progress reports up to date, annual presentation reports, pre-Ph.D. synopsis/seminar report, permission for thesis submission, synopsis (2000 words) his/her thesis will be taken up for further prescribed processing by the system automatically.
- (4) The system will randomly pick up six names of the Ph. D. examiners from the data bank matching research area of the Ph. D. candidate whose thesis is being processed and the research area of Ph. D. examiner.
- (5) Out of these six randomly picked names of the Ph. D. examiners the system will again randomly pick up names of the examiner-1 and examiner-2.
- (6) A request letter to examine the Ph.D. thesis along with a copy of synopsis (*pdf* document) will be sent automatically by the system via e-mail at the same instance. The examiners will be provided with a secured link through which they will be in a position to confirm their acceptance or non-acceptance on-line.
- (7) The system will also pick up two more examiners randomly to whom request to examine the Ph. D. thesis will be sent by the system automatically in case any one or both of the examiner-1 and examiner-2 do not accept the request to examine the said thesis This action will also be automatically implemented by the system as soon as non-acceptance from examiner-1 and/or examiner-2 is submitted on the portal. The examiner so replaced will also be termed as examiner-1 and examiner-2 thereafter.
- (8) In case, there is no reply within thirty days of the request sent via e-mail, from any one or both of the examiner-1 and examiner-2 , a reminder will be sent via e-mail by the system automatically.
- (9) In case, the response is not received to the reminder sent as per section 17.5 within fifteen days, the system will again pick up two more examiners randomly to whom request to



examine the Ph. D. thesis will be sent by the system automatically. This action will also be automatically implemented by the system as soon as fifteen days period is expired. The examiner so replaced will be termed as examiner-1 and examiner-2 thereafter.

- (10) On receipt of the acceptance of examiner-1 and/or examiner-2 the system will automatically send an e-mail along with the soft copy of the said Ph. D. thesis (pdf document) at the same instance. The examiners will be requested to evaluate the Ph. D. thesis within forty five days and upload/submit their evaluation reports on-line through the secured link provided to them. The examiners will also be requested to send hard copies of their evaluation reports duly signed in the prescribed format by speed post to the Controller of Examinations.
- (11) At this stage the system will also send an e-mail to the Controller of Examinations giving the name of the Ph. D. candidate whose thesis is being processed and the addresses of the examiners to whom the soft copies of his/her Ph. D. theses have been mailed by the system. The Controller of Examinations will also receive a request via system generated e-mail to send the hard bound copies of the said Ph. D. theses to the examiners.
- (12) The Controller of Examinations shall send the hard bound copies of the Ph. D. theses by speed post to the examiners with a request to send hard copies of their evaluation reports duly signed in the prescribed format, within one week from the receipt of system generated e-mail.
- (13) In case the evaluation reports are not received on the portal within forty five days the a system generated reminder will be will sent to the respective examiner via e-mail with a request to upload the evaluation report within next twenty days.
- (14) If the evaluation reports are not received on the portal within this extended period of twenty days the system will send a request letter to the next examiner and abovementioned process will be followed in the same order.
- (15) The examiner thus appointed by the system will be hence forth termed as Examiner-3.
- (16) On receipt of two evaluation reports recommending the acceptance of the Ph. D. thesis for the open defense (on the portal) the Controller of Examinations will invite the examiner in the order of the receipt of their evaluation reports and fix the date of open defense in consultation with the research guide and concerned Head of the Department.
- (17) The Controller of Examinations will be responsible for organizing the defense within maximum thirty days after the receipt of second evaluation report recommending the acceptance of the Ph. D. thesis for the open defense.
- (18) In case one examiner recommends acceptance of the Ph. D. thesis for the open defense and the other examiner recommends non-acceptance (rejection). The system will send a request letter to the next examiner and abovementioned process will be followed in the same order. The examiner thus appointed by the system will be hence forth refereed as Examiner-N1. In such case the decision of the Examiner-N1 shall be final and binding on all concerned.
- (19) In case Examiner-1 and Examiner-2 (and/or Examiner-3) both recommends non-acceptance (rejection) of the Ph. D. thesis for the open defense, such case will be placed before the Academic Council for information and final rejection. This decision of the rejection shall be final and binding on all concerned.
- (20) If any one of the Examiner-1, Examiner-2, Examiner-3 and Examiner-N1 (in likely case of appointments of Examiner-3 and/or Examiner-N1) recommends major revision, the candidate shall be informed accordingly by the Controller of Examinations and shall be permitted to the submit his/her revised thesis within *twelve months* from the date of issue of such communication.

- (21) The Controller of Examinations shall send the copies of the revised thesis to all three examiners and the decision of the majority of the examiners shall be final and binding on all concerned.

## **21. Viva-voce and Open Defense of the Ph. D. Thesis**

- (1) Once the date of defense is fixed by the Controller of Examinations communicated to all concerned, he shall notify the same indicating date, time and place where the open defense will be held, at least two weeks in advance.
- (2) Head of the Department shall place a copy of notice of open defense indicating date, time and place where the open defense will be held, at least two weeks in advance. He shall also distribute/circulate this notice to other Departments at least two weeks before the scheduled date of open defense.
- (3) The viva-voce of the Ph. D. candidate shall be arranged and conducted by the Head of the Department in the subject concerned who shall act as Chairman of the open defense committee. The invited external examiner and internal examiner (research guide) will be the members of the open defense committee. The external examiner and the internal examiner shall ask the questions to the defending Ph. D. candidate. In case the concerned Head of the Department is himself a research guide of the candidate being examined the Chairman will be appointed by the Vice-Chancellor on the submission brought before him by the Controller of Examinations.
- (4) All the faculty members, candidates and M. Tech candidates from all the Departments shall be invited to attend the same. They may ask the questions to the defending Ph. D. candidate with the permission of the Chairman. In case any dispute arises during the conduct of defense, the decision of external referee shall be final.
- (5) The candidate must obtain the "Clearance Certificate" from all the Departments/Sections in the prescribed format of the University at least one week of scheduled open defense.
- (6) The Chairman of the open defense committee (ODC) shall hand over the report duly signed by him and both the members of the open defense committee to the Controller of Examinations immediately after the conclusion of the open defense. The Controller of Examinations shall upload this report (*pdf* document) on the portal and shall issue the system generated provisional degree certificate to the Ph. D. candidate after due verification of the contents. (*ANNEXURE – XI*)
- (7) In case the Ph. D. candidate does not defend his thesis to the satisfaction of the open defense committee, the examiners may unanimously recommend with reasons that a fresh viva-voce and open defense of the thesis be organized within period of not less than **three months**. If the defense is still not-satisfactory the committee would record the reasons for the same and refer it to the Academic Council for its consideration and final decision.

## **22. Alternate System to grant a Ph. D. Degree**

- (1) 10 Alternative systems to grant a Ph. D. may be explored in an exceptional case of the candidate demonstrating extraordinary contribution in terms of quality of research having published five or more research papers in peer reviewed/ refereed journals having impact factor of one or more than one.
- (2) In such case the Academic Council may consider such contribution as deemed sufficient to award a Ph. D. degree and appoint one referee to whom the Vice-Chancellor shall request to endorse the relevance of such publications to the registered topic of his/her research. However, such a referee must be either a Director or Ex-Director of any of the

IITs/ Director or Ex-Director of any of the CSIR laboratories/ Shanti Swaroop Bhatnagar award winner, working in the similar area of research.

- (3) On receipt of positive recommendations of the referee the Academic Council may recommend the grant of Ph. D. degree to such candidate and forward the proposal to the Executive Council. The Executive Council may approve the grant and award of Ph. D. degree to such candidate.

### **23. Depository with University Grants Commission (UGC)**

- (1) Following the successful completion of the evaluation process and announcements of the award of provisional Ph. D. degree, the Controller of Examinations shall submit a soft copy of the Ph. D. thesis to the UGC within a period of thirty days, for hosting the same in INFLIBENT accessible to all Institutions/Universities.
- (2) The University shall issue a certificate, certifying to the effect that the Degree has been awarded in accordance with the Regulations issued by the UGC as per the Notification dated 1st June 2009 and published in Gazette on 11th July, 2009.

### **24. Conferment of Degree**

The Ph. D. degree shall be conferred on the candidate in the ensuing convocation of Dr. Babasaheb Ambedkar Technological University on approval of the Academic Council and the Executive Council.

## **Annexure-I**

### **Guidelines for Thesis Preparation**

- (1) A candidate submitting thesis for the Ph. D. degree is required to follow the instructions (described in this section) regarding the size, style and binding of thesis. All copies of the thesis shall be presented in a permanent and legible form in typescript or print. Drawing and Diagrams should be in black ink. Paper of good quality and sufficient capacity of normal reading should be used. The size of sheets used should normally be A4 (i.e. 8.27" x 11.69"). Margins at the binding edge shall not be less than 1.5" and other margins not less than 1". One and half spacing be used in type script, except for foot notes where single spacing may be used. The title page of the thesis shall give the following information in the order listed below:
  - a. The full title of the thesis and the subtitle, if any
  - b. The full name of the author (candidate)
  - c. Name of Ph. D. Guide
  - d. The degree for which the thesis is submitted
  - e. The name of the University and the name of the Department
  - f. The month and year of submission
- (2) A table of contents shall immediately follow the title pages. If a list of tables and illustrations is provided, it should follow the table of contents and should list all tables, photographs, etc. in the order in which they occur in the text. Any acknowledgements shall be on the page following the table of contents. If the thesis contains any material which the author has used before, this fact shall be indicated in a declaration immediately following the acknowledgements. There shall be an abstract of the thesis. The abstract shall follow the acknowledgement and declaration. For abbreviations not in common use a key shall be provided with the full term followed by the abbreviations in brackets.
- (3) The thesis shall be divided approximately into chapters, sections and subsections. The system of Headings should be consistent and should provide a clear indication of changes in content, emphasis and other features which occur at each stage of the work.
- (4) References cited in the text may be identified by numbers typed as superscript, or if on the line, in brackets, immediately following the relevant work or phrase in the text or by citing the author's name and the year of publication in round brackets immediately following the relevant work or phrase in the text (e.g. Sharma, 1982).
- (5) Appendices shall follow the main text. The style of the appendices shall be consistent with the style of the main text. The list of references should be arranged in accordance with the system of citation used. While using numbers typed as superscript the references should be listed in the order in which they are identified in the thesis whereas, while using round brackets they should be listed alphabetically by the author's surname. In both cases the list should enable the reader to identify the work cited and to locate the specific pages referred to. If bibliography is supplied it should be arranged in a logical order, for example in broad subject classes and within each class, alphabetically by author.
- (6) Illustrative material such as practical, diagrams, maps, illustrations, computer printout, published papers and tables shall have a binding margin of at least 1" and should, if possible, be bound in the thesis nearer the appropriate text. Illustrative material which cannot be conveniently bound in text (such as large maps, slides, sound or videotapes, cine films) shall be packaged in such a way that it can be bound with the thesis. If the amount of such material is substantial, it should be gathered into a „supplementary volume“ and packaged in a rigid container similar in format to the bound thesis. Unbound material and its packaging shall both be marked with the author's name, initials and the degree for which the work is

submitted in such a way that it can be readily linked with the thesis and it shall contain appropriate instructions for use.

- (7) The copies of the thesis shall be bound in cloth covered boards with leaves permanently secured. The front cover shall bear the title of the thesis, the name of the author, the name of the degree for which the thesis is submitted, the name of the respective Department and the year of submission. The spine of the thesis shall bear the name of the author, the degree for which the thesis is submitted and the year of submission. This information shall be printed along the spine in such a way that it is readable when the volume is lying flat with the front cover uppermost. If the thesis consists of more than one volume, the front cover of the spine shall also bear the number of each volume.
- (8) While submitting the thesis the candidate shall indicate whether the work is based on discovery of new facts by the candidate or of new relations of facts observed by others and how the work leads to the general advancement of knowledge. The candidates shall further forward a statement indicating the sources from which information has been derived and the extent to which he/she has based his/her work on the work of others and shall indicate which portion or portions of his/ her thesis he/she claims to be original. Where a candidate presents a joint work, he/she shall clearly state the portion which is his/her own contribution as distinguished from the portion contributed by his/her collaborator. This statement should be certified as correct by his/her research guide.

**ANNEXURE - II**  
**No Objection Certificate (For Full-Time Candidate)**  
**On Official Letter Head**

To  
The Registrar,  
Dr. Babasaheb Ambedkar Technological University, Maharashtra

Sub: No Objection Certificate for joining full-time Ph. D. program

Dear Sir/ Madam,

Mr. / Ms. \_\_\_\_\_ who is working in  
this Institute/ Organization/ University as \_\_\_\_\_ is applying for  
full-time Ph. D. program for the session \_\_\_\_\_.

This Institute/ Organization/ University has No Objection for the same.

We are pleased to forward his/her application for admission to full-time Ph. D. program  
recognized by Dr. Babasaheb Ambedkar Technological University.

The employee will be relieved from his/her duties to join the full-time Ph. D. program, if  
admission is offered by the University.

Date:  
person:  
Place:

Signature of the authorized  
Name:  
Designation:

**Seal of the Institute/ Organization/ University**

**ANNEXURE - III**  
**No Objection Certificate(for Part-Time Candidate)**  
**On Official Letter Head**

To,  
The Registrar,  
Dr. Babasaheb Ambedkar Technological University, Maharashtra

Sub: No Objection Certificate for joining part-time Ph. D. Program

Dear Sir/ Madam,

Mr. / Ms. \_\_\_\_\_ who is working in  
this Institute/ Organization/ University as \_\_\_\_\_ is applying for  
part-time Ph. D. program for the session \_\_\_\_\_.

This Institute/ Organization/ University have No Objection for the same.

We are pleased to forward his/her application for admission to part-time Ph. D. program  
recognized by Dr. Babasaheb Ambedkar Technological University.

We shall grant him / her leave of absence to attend the classes / examinations and conduct  
research work prescribed by Dr. Babasaheb Ambedkar Technological University during the entire  
Ph. D. program as per requirements, rules and regulations of the University.

Date:  
person:  
Place:

Signature of the authorized  
Name:  
Designation:

**Seal of the Institute/ Organization/ University**

**ANNEXURE - IV**

**Dr. Babasaheb Ambedkar Technological University, Maharashtra**

**Application form for Leave/Field Visits for Full-Time Ph. D. Candidate**

Date: \_\_\_\_\_

To Head, Department of \_\_\_\_\_,

Dr. Babasaheb Ambedkar Technological University, , Maharashtra

Sir, I request you to kindly sanction Leave /Duty Leave for \_\_\_\_\_ day/days

from \_\_\_\_\_ to \_\_\_\_\_ for the reason \_\_\_\_\_

**Purpose of Duty Leave:**

\_\_\_\_\_  
\_\_\_\_\_

*(Candidate has to submit a visit report to Head of the Department after every field visit).*

**My address during the leave period:** \_\_\_\_\_

\_\_\_\_\_

**My leave record:** Calendar year: \_\_\_\_\_ Leave consumed \_\_\_\_\_ days Leave applied

for \_\_\_\_\_ days Leave balance \_\_\_\_\_ days Thanking you, Yours faithfully, Signature

\_\_\_\_\_ Name \_\_\_\_\_ Roll Number

\_\_\_\_\_

Recommended / Not Recommended Sanctioned / Not Sanctioned

**Supervisor**

**Supervisor**

**Head of the Department**



**ANNEXURE – V**

**Dr. Babasaheb Ambedkar Technological University, Maharashtra**  
**Application form for Recognition of Outside Laboratory / Department/Centre**  
*(To be filled by the Head of the Laboratory/Department/Centre)*

1. Name of the Laboratory/Department/Centre: \_\_\_\_\_

2. Address: (with Tel/Fax/e-mail/web-site)

3. Name and address of the University/Institute/Organization:

Technical and Scientific Information: *(Write in a separate sheet and attach)*

1. Major activities of the Organization

2. Details of facilities available with list of major equipments/ instruments/setup/software/pilot plant etc.

3. Details of Library facilities (books and Journals):

a) Total books in the related field

b) Journals in the related field (attach list)

4. List of computational facilities available (both *inside the laboratory and as common facility*)

5. Details of the internet facilities available (both *inside the laboratory and as common facility*)

**Administrative Information:**

1. Type of the Organization (Central Govt./State Govt./Public sector/Private sector/Autonomous body):

2. Name, designation and Address of the Head of the Organization:

3. Name, designation and Address of the Head of the Lab/Dept/Centre: \_\_\_\_\_

4. Major areas of activities (e.g. Biotechnology, CAD, etc.): \_\_\_\_\_

**5. Any other information:**

Certified that this information is furnished to obtain recognition for this Laboratory / Department / Centre from Dr. Babasaheb Ambedkar Technological University, Lonere-Raigad for Ph. D. program in the area of \_\_\_\_\_.

Date: \_\_\_\_\_

Signature of the Head of the Laboratory/Department/Centre

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

**Seal of the University/Institute/Organization**

**For office use only**

Approval By Sub-Committee appointed by the Academic Council on (Date of meeting):

\_\_\_\_\_ vide Item/Resolution No. \_\_\_\_\_

Signature of the Members of the Sub-Committee

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

Date : \_\_\_\_\_

**ANNEXURE – VI**  
**Dr. Babasaheb Ambedkar Technological University, Maharashtra**  
**Course Registration Form**

Name of the Candidate: \_\_\_\_\_

Department: \_\_\_\_\_

Date of Ph. D. Admission: \_\_\_\_\_

Title of Ph. D. Thesis as approved by RC: \_\_\_\_\_

\_\_\_\_\_

Date: Place: Signature of the candidate Courses recommended by RC (Separate sheet may be used):

1. \_\_\_\_\_

2. \_\_\_\_\_

The Ph. D. candidate wish to join the course titled \_\_\_\_\_ which is offered by the teacher \_\_\_\_\_ of \_\_\_\_\_ Department in the academic year \_\_\_\_\_. We allow him to take this course which is offered by our Department in the current semester.

**Concerned Course Teacher**

**Concerned Head of the Department**

Approval by the Head of the Department (Department to which Ph. D. candidate has taken the admission)

**Supervisor**

**Supervisor**

**Head of the Department**

**Copy to: Controller of Examinations**

**ANNEXURE – VII**  
**Dr. Babasaheb Ambedkar Technological University, Maharashtra**  
**Progress Report**

1. Name of the Candidate: \_\_\_\_\_

2. Registration Number: \_\_\_\_\_

3. Department: \_\_\_\_\_

4. Date of Ph. D. Admission: \_\_\_\_\_

5. Title of the Ph. D. Thesis:

a. Title approved at the time of registration:

\_\_\_\_\_  
\_\_\_\_\_

b. Proposed revision in the title, if any:

\_\_\_\_\_  
\_\_\_\_\_

c. Is the revised topic altogether different from what was registered?

\_\_\_\_\_  
\_\_\_\_\_

6. Period under review: \_\_\_\_\_

7. Previous Progress Seminar Date: \_\_\_\_\_

8. Details of fees paid till date: *(Please attach photo copies)*:

\_\_\_\_\_

9. Progress report: *(Please attach photo copies)*: \_\_\_\_\_

10. Details of the course work carried out/to be carried out:

- Title of theory course with date of completion: *(Please attach photo copy of grade sheet)*:

\_\_\_\_\_

- Title of seminar with date of completion: *(Please attach photo copy of grade sheet)*:

\_\_\_\_\_

11. Place(s) of work during the period under review:

\_\_\_\_\_  
\_\_\_\_\_

12. Probable place(s) of work the next review period: \_\_\_\_\_

13. Any publication/s after registration till date: *(Please attach photo copies)*:

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14. List of Conferences attended, if any, after registration till date (*Please attach separate sheet, if required*):

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15. Remarks of the Research Progress Committee:

- a) Quality of work done: Excellent / Good / Satisfactory / Not satisfactory
- b) Quantity of work done: Enough/Just sufficient/Insufficient
- c) Expected period for completion of program: One year /two years/three years/four years

16. Any specific comments / suggestions:

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Name and Signatures of the Research Progress Committee /Evaluation Committee Members

1. Subject Expert: \_\_\_\_\_

2. Subject Expert: \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_

**ANNEXURE – VIII**  
**Dr. Babasaheb Ambedkar Technological University, Maharashtra**  
**Pre-synopsis Seminar Report**

1. Name of Candidate: \_\_\_\_\_

2. Registration Number: \_\_\_\_\_

3. Department: \_\_\_\_\_

4. Date of Ph. D. Admission: \_\_\_\_\_

5. Title of the Ph. D. Thesis:

a) Title approved at the time of registration:

\_\_\_\_\_

b) Proposed revision in the title, if any:

\_\_\_\_\_

c) Is the revised topic altogether different from what was registered?

\_\_\_\_\_

6. Period under review (from the date of registration till date):

\_\_\_\_\_

7. Previous Progress Seminar Date: \_\_\_\_\_

8. Details of fees paid till date (*Please attach photo copies*):

\_\_\_\_\_

9. Biannual progress report(s) submitted till date: \_\_\_\_\_

10. Details of the course work carried out:

a) Title of theory course with date of completion (*Please attach photo copy of grade sheet*):

\_\_\_\_\_

b) Title of seminar with date of completion (*Please attach photo copy of grade sheet*): \_\_\_\_\_

\_\_\_\_\_

11. Place(s) of work after the previous progress seminar till date:

\_\_\_\_\_

12. Any publication(s) after registration till date (*Please attach photo copies*):

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13. List of conferences attended, if any, after registration till date (*Please attach a separate sheet, if required*):

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14. Recommendations of the Research Committee (*tick mark*):

- a. Thesis be accepted for submission and evaluation by examiners
- b. Thesis may be accepted for submission and evaluation by examiners after minor modifications as suggested by members. The thesis need not be referred to RC again. The following member(s) of the RC will ensure incorporation / implementation of suggestions:  
\_\_\_\_\_
- c. Major modifications are suggested by RC members. The thesis may be referred to RC again within \_\_\_\_\_ months after incorporation / implementation of suggestions.
- d. The thesis in the present form is rejected. The Candidate is required to work further.

Minor / Major modifications suggested (if any)/ Comments (if any) (use separate sheet, if required):

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Name and Signatures of the Research Committee Members:

1. Subject Expert: \_\_\_\_\_

2. Subject Expert: \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

Date: \_\_\_\_\_ Place: \_\_\_\_\_

**ANNEXURE – IX**  
**Dr. Babasaheb Ambedkar Technological University, Maharashtra**  
**Format for Submission of Ph. D. Thesis**

**Certificate: 1**

This is to certify that Mr./ Ms. \_\_\_\_\_  
\_\_\_\_\_ having Registration No.  
Department of \_\_\_\_\_ has been prescribed  
course and he/she has qualified the prescribed credit requirements. *(Please attach a photo copy of  
mark sheet)*

**Controller of Examination**

**Certificate: 2**

This is to certify that Mr./ Ms. \_\_\_\_\_  
\_\_\_\_\_ having Registration No. \_\_\_\_\_ has paid all the fees (term fee, thesis examination fees, convocation fee,  
alumni membership fee, etc.) as per the existing Ph. D. rules. He/she has paid the retention fee (if  
applicable), till the submission of thesis.

**Office Superintendent  
(Student Section)**

**Assistant Registrar  
(Student Section)**

**Certificate: 3**

This is to certify that Mr./ Ms. \_\_\_\_\_ having  
Registration No. \_\_\_\_\_ has carried out his/her research work under my  
guidance and supervision during the period to \_\_\_\_\_. He/She has prepared the thesis  
as per the instructions/guidelines given in the existing Ph. D. rules. It is further certified that this  
thesis does not include any work which has previously been submitted for the award of any  
degree.

**Signature of Supervisor**

**Signature of Supervisor**

**Certificate: 4**

This is to certify that the Mr. /Ms. \_\_\_\_\_ has submitted all  
the progress reports and given progress seminars as per the existing Ph. D. Rules

**Registrar**

**Certificate: 5**

Forwarding remarks of Head of the Department:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Head of the Department**



**Certificate: 6**

I am herewith submitting \_\_\_\_\_ number of thesis copies, together with the certificates from the Student Section/ Examination Section/ Guide/ Registrar/ Head of the Department.

My address for communication is as follows:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Pin \_\_\_\_\_

Phone: \_\_\_\_\_

Mobile: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Signature of the Candidate**

To,  
Controller of Examinations,  
Dr. Babasaheb Ambedkar Technological University Maharashtra.

**ANNEXURE – X**  
**Dr. Babasaheb Ambedkar Technological University, Maharashtra**  
**Declaration by the Candidate**

I hereby declare that the work being submitted in this thesis titled

\_\_\_\_\_

\_\_\_\_\_ in partial fulfillment for the requirements for the award of degree of **Doctor of Philosophy** and submitted in the Department of \_\_\_\_\_, Dr. Babasaheb Ambedkar Technological University, Maharashtra is an authentic record of my own work carried out during the period \_\_\_\_\_ under supervision of \_\_\_\_\_ and \_\_\_\_\_ (*Name of Guide/Designation*). The matter presented in this thesis has not been submitted for award of any other degree of this or any other University /Institute.

**Signature of the Candidate**

Name of the Candidate: \_\_\_\_\_

Registration No.: \_\_\_\_\_

This is to certify that the above declaration made by the candidate is correct to the best of my/our knowledge and belief.

Supervisor

Supervisor

**ANNEXURE – XI**  
**Dr. Babasaheb Ambedkar Technological University, Maharashtra**  
**Report of Ph. D. Thesis Defense Committee**

We, the members of Defense Committee certify that the thesis entitled

\_\_\_\_\_

\_\_\_\_\_ submitted by \_\_\_\_\_

\_\_\_\_\_ to the Dr. Babasaheb Ambedkar Technological University Maharashtra in partial fulfillment of requirement of the Ph. D. degree in the Department of \_\_\_\_\_ under the faculty of Engineering and Technology has been examined by us and it is recommend that:

- a. The degree be awarded
- b. The candidate be further examined on an another date not later than \_\_\_\_\_ (*Note: Please strike out the clause which is not applicable*)

Supervisor (Internal Examiner)

Supervisor (Internal Examiner)

External Examiner

Chairman, ODC

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Forwarded to Controller of Examinations

## **R.3.2. ADMISSION, MONITORING AND AWARD OF DEGREE OF MASTER OF ENGINEERING/ PHARMACY/ ARCHITECTURE / MANAGEMENT**

Dr. Babasaheb Ambedkar Technological University offers full-time Post Graduate, M. Tech. Programs in the academic disciplines of Chemical Engineering, Power Systems Engineering, Environmental Engineering, Manufacturing Engineering, Electronics and Telecommunication Engineering, Thermal and Fluids Engineering, and Computer Engineering. These rules and regulations shall also be applicable for any new post graduate programs, M. Pharm, M. Arch, and M. HMCT. introduced by the University from time -to-time.

The provisions contained in these Rules and Regulations will govern the conditions for imparting courses of study/instructions, conducting examinations and evaluation of students' performance leading to all Masters' degree Programs of the University.

### **1. Admission**

1. Admissions to M. Tech. Programme will be made through a Centralized Admission Process (CAP) as prescribed by the Government of Maharashtra from time to time.
2. All students admitted shall be required to pay at the time of joining and also in the subsequent semesters prevalent tuition and other fees prescribed by the University (as per Government of Maharashtra directives) till they are on roll.
3. The University reserves the right to cancel the admission of any student, and ask him/her to discontinue his/her studies at any stage of his/her career on grounds of unsatisfactory academic performance, irregular attendance in classes or indiscipline.

Rules regarding conduct and discipline are given in Appendix –I

### **2. Academic Calendar**

The academic year will be divided into two semesters. The Academic Council of the University shall approve the schedule of academic activities for an academic year including the dates of registration, Mid-Term Test, End Semester Examinations, and Inter Semester Break etc. and shall be referred to as the Academic Calendar for the year.

### **3. Allocation of Supervisor (Guide)**

- a) The PG dissertation supervisor to a PG student will be allocated within two months of admission in his/her first semester of the course.
- b) The Departmental Project Assessment Committee (DPAC) of the department will allocate the PG student to a faculty member amongst the PG teacher. The allocation will be based on the mutual interest of the student and the concerned faculty member
- c) However, no faculty member can guide more than 3 students from the same batch of students.
- d) The Head of the department will ensure the equal distribution of the students amongst the PG teachers.

### **4. Attendance Requirements**

1. Attendance in all classes will be mandatory. A student may be debarred from appearing at an examination on the ground of unsatisfactory attendance.
2. Minimum required attendance in each theory / laboratory course will be 75 % for appearing at the end semester examination. Only in exceptional cases of prolonged illness or a calamity in the family, condonation of shortage of attendance up to 15% (i.e. attendance to be 60% or more) may be granted by the Heads of the Department concerned. In any case if the attendance is less than 60% he/she will not be permitted to appear for the semester examination for that subject and he/she has to re-register for that subject when offered next.

3. A student of M. Tech program is entitled to avail leave of absence for a total period of maximum 30 days in a calendar year.
4. Any absence over and above the prescribed limit of admissible leave shall entail deduction from the scholarship, if applicable, besides other action as may be decided by the University.

### 5. Course Structure

1. Teaching for the M. Tech Programme shall be reckoned in credits, as specified against each subject.
2. In order to qualify for a M. Tech degree of the University a student is required to complete all the credits specified in the scheme of instruction for that program as approved by the University from time to time.
3. The curriculum for a M. Tech Programme shall comprise of core and elective subjects.
4. The list of elective subjects may include subjects from allied/ interdisciplinary areas also.

### 6. Evaluation

- (1). Evaluation in the theory courses shall be done as follows, for a total of 100 marks.

Sr.	Examination	Details
1.	Mid-Term Test (1)	20%
2.	Continuous Assessment	20%
3.	End Semester Exam	60%
Total		100 marks

Continuous assessment shall be in the form of announced Quizzes, class tests (open or closed book but minimum 2 in the semester if only mode of CA), home assignments, group assignments, *viva-voce* discussions, etc. The teacher shall announce the mode of continuous assessment at the beginning of the course.

2. For subjects like laboratory/design (intra semester assessment)

Sr.	Examination	Details
1.	Continuous assessment	60%
2.	Examination/Viva	40%

The continuous assessment shall be based on regular attendance for laboratory sessions, completion of experiments, *viva -voce examination*, journal submission, assignments, project, experiments, announced tests. The end semester examination in laboratory, if any, shall be conducted by one internal and one external examiners together.

### 7. Dissertation (Thesis) Evaluation

1. Total 42 credits are assigned to the project work (dissertation) carried out by a student. The project work is divided into two stages. Stage I commence at the beginning of 3<sup>rd</sup> semester with a weightage of 14 credits and will be assessed at the end of the 3<sup>rd</sup> semester. Stage II commences at the beginning of 4<sup>th</sup> semester with a weightage of 28 credits and will be assessed at the end of 4<sup>th</sup> semester. For the purpose of assessment, the performance of a student in the project work shall be divided into the following sub components with assigned weightage.

Sr.	Component	Weightage
1.	Supervisor (Project Guide)	50%
2.	Departmental Project Assessment	20%

	Committee	
3.	External Examiner	30%

2. External examiner shall be preferably from outside the University and not below the rank of Associate Professor.
3. The Dissertation must be submitted on or before 31<sup>st</sup> July. The students who will not be able to submit the Dissertation on or before 31<sup>st</sup> July will not be allowed to appear for the regular examination/defense. They will have to appear in the subsequent supplementary examination/defense arranged by the University.
4. The project supervisor will periodically review the student progress over the period and finally give his assessment of the work done by the student.

### **8. Synopsis Seminar**

A student shall be required to present a synopsis seminar of the work and deliver a seminar talk of 20-25 minutes duration in 4<sup>th</sup> semester as per the schedule announced by the Department. The synopsis seminar shall be assessed by DPAC consisting of respective Head of the Department, supervisor of the student concerned, three faculty members nominated by the Head of the concerned Department from amongst the PG supervisors.

The student will be allowed to submit the dissertation subject to satisfactory defense of the synopsis. If the synopsis seminar is not found satisfactory, the student will have to do rectification/more work as suggested by the DPAC.

The student shall thereafter deliver another synopsis seminar within one month. The project assessment committee shall be at liberty to extend the duration of the project work by a maximum period of 3 months should they find that the level of work done has not been satisfactory.

### **9. Dissertation and Viva-Voce**

- a) A student shall be required to submit a dissertation on the Project Work carried out by him/her. Three / four bound copies of the thesis (along with a soft copy to be submitted to the Controller of Examinations) shall be submitted to the Head of the Department on or before 31<sup>st</sup> July. The soft copy of the dissertation will be sent by the Controller of Examinations via e-mail to the external examiner, appointed by the appropriate authority, from a panel of experts prepared by the University.
- b) The dissertation supervisor/guide shall certify antiplagiarism check certificate from a University certified agency submitted by the candidate along with the dissertation report/thesis.
- c) Dissertation viva-voce shall be arranged by the Controller of Examinations within thirty days (maximum). The external examiner will conduct the viva-voce along with the internal examiner.

### **10. Project in Collaboration with industry**

A student may, with the approval of Head of the Department, do the project work with an Industry, a Research and Development Organization or another academic Institution/University. The student shall acknowledge the involvement and/or contribution of an industry, R&D organization or University in completing the project in the dissertation and a certificate to this effect, issued by the supervisor from the industrial organization, will be appended to it.

It is mandatory for all students (especially those who do their project in an Industry, R&D organization or University in India or abroad) to make a full disclosure of all data on which they wish to base their thesis. They cannot claim confidentiality as it would come into conflict with the Industries, R&D laboratories or other University's own interests. Any

tangible intellectual property other than copyright of thesis may have to be assigned to the Institute; the copyright of the thesis itself would however lie with the student as per the IPR Policy in force at the time. The student's thesis shall be rejected unless there is full and complete disclosure of data and the student will not be eligible for the degree of the Institute in such cases.

In addition to the Supervisor from the enrolled department, a Co-Supervisor may be appointed from the Industry and Research Laboratories with the approval of the DPAC. A certificate from the Co-supervisor will be appended to the dissertation. A member of faculty of the University who is the internal Supervisor may, if felt necessary, visit the Industry or the Research Laboratory in connection with the Project of a student.

## 11. Registration

1. All students of the post-graduate courses are required to register for the prescribed subjects at the commencement of each of the semester, on the day announced for such registration.
2. Registration of the students will be organized by the Heads of the concerned Department
3. A student, who does not register on the day announced for the purpose may be permitted, in consideration of any compelling reason, late registration within the next three working days on payment of a prevalent additional late fees as prescribed by the University. Normally no late registration will be permitted after the third working day from the scheduled date.
4. Only those students will be permitted to register who have cleared all University dues of the previous semester and made all required advance payment of University for the current semester for which they are registering.
5. A student of M. Tech Program may be allowed to withdraw temporarily (become on-resident) on the recommendation of his supervisor and the Head of the Department and with the approval of the Vice-Chancellor after he has successfully completed two/three semesters of the course work continuously. A student so permitted may submit his dissertation later, provided that in such a case the project work must be completed under the guidance of his supervisor after re-joining the University on payment of the prescribed fees. He must work for one full year after rejoining on his project work. The dissertation must be submitted within 5 years from the date of his first admission.
6. A student withdrawing himself, under the provisions of para 11.5 above, before the prescribed date for submission of dissertation shall not be allowed to submit his/her dissertation along with regular students of his batch.
7. Students who discontinued their studies without prior permission before completing the First (Autumn), Second (Spring) and Third semester course work shall be deemed to have abandoned his studies and their names will be struck off the rolls of the University with effect from the date of absenting from the classes.

## 12. Grading System

1. The Grading system for the theory courses shall be the same as described in R1 for UG courses.
2. The grades to be allotted in the case of students who fail or do not appear at the end-semester examination shall be as under

Letter Grade	Grade Point	Explanation
FF	0	The candidate fails in subject head. The candidate will be

		allowed to take end-semester repeat or subsequent examinations as per rule.
XX	0	(i) The candidate has not kept term for the subject head due to attendance less than requisite 75%. (ii) The in-semester performance of the candidate is very poor. Further see 7.3.5(g) In the above cases, the candidate has to repeat the respective course by paying the fees in the following year
II	0	The candidate has kept term for the subject head, has taken all the internal examinations with satisfactory performance, but has failed to take the end-semester examination due to genuine reasons. The candidate will be allowed to take subsequent examinations as per rule
FR	0	The candidate has exhausted all the permissible chances to clear the end-semester examinations. The candidate has to register for the respective semester again for all the subject heads or will be out of the respective degree course as per the rules.
DR	0	(i) The candidate hasn't participated in academic programme. (ii) The candidate has taken a drop for the subject head;- provided he/she intimates the same (i or ii) at least 7 days in advance of the commencement of the end-semester examination for the respective year.

3. When a student gets the grade “II” for incomplete assessment for any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring this (these) subject(s). After the “II” grade(s) has (have) been converted to appropriate grades, the SGPA and CGPA for the semester will finally be recalculated after taking into account these grades.
4. When a student gets the “FF” grade in any subject during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only “zero point” for each such “FF” grade. After the “FF” grade has been substituted by better grades during a subsequent semester, the SGPA and CGPA of all the semesters starting from the earliest semester in which the “FF” grade has been updated will be recomputed and recorded to take this change of grade into account.
5. When a student gets XX grade in a subject, he is debarred from appearing for examination in that subject. He will have to complete the course by registering in that subject in the following semesters when the course is offered again.

### 13. Awarding of Grades

1. There will be continuous assessment of a student’s performance throughout the semester and grades will be awarded by the teacher concerned or by the appropriate committee appointed for the purpose.
2. In the case of theory subjects:
  - a) The Mid Term test, and end semester examinations will be conducted by the University/ College as per the schedule notified in the academic calendar.



- b) For theory subjects, the final grades will be awarded on the basis of Mid Term Test, continuous assessment and End-Semester examination according to the weightage specified in para 6.1.
  - c) The final grades for a subject must be submitted to the Head of the Department by the teacher concerned within Five Days of the date on which the end semester examination for that subject has been held.
3. For subjects like laboratory/design, workshop practices, etc. the evaluation will be based on the weightage as specified in para 6.2.
  4. A Seminar/Project evaluation based on the weightage as specified in para 7.1.
  5. In converting the percentage of marks obtained by the students to letter grades the following grading system will be used. The numerical score awarded shall correspond to a letter grade according to the following table.

<b>% of Numerical marks</b>	<b>Grade</b>
91 % and above	Ex
81 % or above but less than 91 %	A
71 % or above but less than 81 %	B
61 % or above but less than 71 %	C
51 % or above but less than 61 %	D
45 % or above but less than 51 % (Theory)	E
Below 45 %	FF

#### **14. Examinations**

1. Students will be permitted to appear in the examinations of only those subjects for which they have registered themselves in the beginning of a semester.
2. A student can appear for re-examinations in the subject(s) concerned in which he/she gets "FF" grade. The re-examinations pertaining to both even and odd semesters will be conducted as per the schedule notified in the academic calendar. In re-examination the student will be given one grade lower than the actual performance grade except in the case of Grade "E" which will remain unchanged. The student will apply in a prescribed form together with necessary fees in order to appear in the re-examinations.
3. Students with "FF" grades also have an option to re-register for the subject (s) in which they had failed, in the following Autumn Semester or Spring semester. In such a case they will be entitled to full credit according to performance at the examination.
4. A student whose performance in any of the parts of the project work has been unsatisfactory, may be assigned additional work on the same problem or assigned a new problem by the Supervisor. If the student is assigned additional work then he/she will have to complete the work and appear at Viva-voce as per the schedule announced by the Controller of Examinations. If the student is assigned a new problem on account of any reason, the student will have to submit the dissertation and complete the viva-voce by 31st December of that calendar year. The student will not be eligible for scholarship during the extended period of his stay but will have to pay project prescribed fees during the extended period of stay.

#### **15. The incomplete grade 'II' and debarred grade 'XX'**

- a) The grade, "II" may be temporarily given to a student who is unable to appear in the End-semester examination because of:

- 1) Illness or accident or any such misfortune which disables the student from appearing in the examination. This must be duly supported by a proper certificate issued by a competent Medical Officer or any other concerned authority and endorsed by the respective Head of the Department.
  - 2) A calamity in the family at the time of the examination which, in the opinion of the Head of the Department forced the student to be away from the campus.
- b) In an exceptional case, if a student is unable to appear at a periodic test for any of the compelling reasons mentioned above, the teacher concerned, may conduct a test with same weightage with the prior information to the of the Head of the Department and CoE.
  - c) A student who has been awarded grade “IP” in a subject in the end-semester examination shall have the option to either:
    1. appear at a re-examination to be held by the Department by filling in the application in prescribed form together with payment of necessary fees. In the re-examination the student will be awarded actual grade obtained from the performance in the examination. **Or**
    2. Re-register for the subject in the subsequent semester in which it is offered. In such case the student is entitled to full credit in accordance with the performance. No re-examination will be held in laboratory/Design subjects. The student has to re-register during a regular semester.

**d) Debarred grade “XX”:**

A student may be awarded an “XX” grade who

- a) is absent for a major part of a semester (minimum 75% of the lectures or 60% with permission for valid reason), or
- b) does not complete a major part of the laboratory / design/ seminar work (minimum 75% of the duration or 60% with permission with valid reason) etc, or
- c) does not appear in the Mid-Term test without any acceptable ground shall be awarded grade “XX” and he/she shall be debarred from appearing at the end semester examination of the corresponding subject (s).
- d) does not complete 75% of the total credits in the concerned semester.
- e) A student who is debarred from appearing at the end-semester examination for reasons as specified by *para* 11.4 will be required to re-register for the subject(s) in the next semester when they are offered by the Department, subject to other conditions of the regulations.
- f) A student with XX grade in Sem-I or Sem-II of the First year of the Master’s course cannot register for the next academic semester/year.

**16. Graduation Requirements**

1. In order to qualify for a M. Tech Degree of the University, a student must have
  - a. completed all the credit requirements for the degree, as prescribed by the Academic Council, with grade “E” or a higher grade in each of the subjects etc. for which the student registered in all the semesters.
  - b. obtained a CGPA of 6.00 or more at the end of the semester in which the student completes all the requirements (including the dissertation), for the degree.
  - c. A student securing CGPA below 6.6 at the end of 4th semester of M. Tech. program will be awarded “Second Division”. A student securing CGPA of 6.6 and above but below 7.5 will be awarded “First Class” and a student securing CGPA of 7.5 and above will be awarded “First Class with Distinction”.
2. A student who has qualified for the degree will be admitted to it only after the student has cleared all University dues, if any, outstanding against him/her and has returned all library books borrowed by him/her and also returned instruments, Department library books etc. in good condition.