

**Dr. Babasaheb Ambedkar Technological University,
Lonere-Raigad – Raigad**



Ph. D. Rules and Regulations 2012

*For Admission, Monitoring and Award
of
Degree of*

***Doctor of Philosophy
(Ph. D.)***

*under the
Faculty of Engineering and Technology*

(As approved by the Academic Council on 1st December 2012
and by the Executive Council on 15th December 2012)

www.dbatuonline.com

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 and Petrochemical Engineering, Civil Engineering, Computer Engineering and Information Technology, Electrical Engineering, Electronics and Telecommunication Engineering, Mechanical Engineering and in the academic disciplines of Chemistry, Mathematics, Physics and Humanities under the faculty of Engineering and Technology. These rules and regulations shall also be applicable for any new Ph. D. programs introduced by the University from time-to-time.

1. Eligibility

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 Second Class awarded by any recognized University/Institute. The candidates applying for Physics, Chemistry and Mathematics should have passed M. Sc. or equivalent degree in the relevant subject with minimum Second Class awarded by any recognized University/Institute. The candidates applying for Humanities should have passed M. A. or equivalent degree in the relevant subject with minimum Second Class awarded by any-recognized University/Institute.

2. Admission Process

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***).

- 2.1. A candidate seeking admission to the Ph. D. degree program shall apply on-line on the portal of Dr. Babasaheb Ambedkar Technological University, Lonere-Raigad- Raigad 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***. 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 news paper/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. 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.
- 2.2. Entrance Examination is mandatory for the candidates seeking admission to the Ph. D. degree in University Departments. The Entrance Examination will be conducted by the University on the First Saturday of the month of August and February every year.

Candidates will be able to download and print their Hall Tickets for the Entrance Examination from the portal after the 25th July or 25th January of every academic year. Candidates must bring their Hall Tickets at the time of Entrance Examination.

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.

- 2.3. **Structure of the Entrance Examination:** The Entrance Examination will be conducted in two parts; General Aptitude Test and Subject Specific Test.

Paper–I: General Aptitude Test (100 Marks), Time: 11.30 AM to 1 PM

This Paper will have 40 Multiple Choice Questions (MCQs) of 2 Marks each covering Verbal Ability, Numerical Ability, and Reasoning Ability (80 Marks) and 2 General Descriptive Questions of 10 Marks each designed to test the candidates Motivation, Idea, Vision and Expectations (20 Marks).

Verbal Ability: To measure your degree of comfort with the English Language,

Numerical Ability: To test your fluency or comfort with Numbers and Calculations,

Reasoning Ability: To measure your ability to understand and grasp relationships between concepts 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.

The list of Qualified candidates (Paper – I) will be displayed on the portal on the Day of the conduct of Entrance Examination after 8 PM.

Paper–II: Subject Specific Test (100 Marks), Time: 3 PM to 4.30 PM

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 GATE/SET/NET/JRF for Sciences.

This Paper will have 25 Multiple Choice Questions (MCQs) of 2 Marks each (50 Marks) covering relevant subjects in the respective branch of Engineering or Sciences and 10 Descriptive Questions of 5 Marks each designed to test the candidates knowledge of the Core Subjects in the relevant branch of Engineering and Technology or Sciences (50 Marks). This Examination will be conducted by respective University Departments.

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.

- 2.4. **Interview:** All the candidates who have qualified General Aptitude Test (Paper–I) and Subject Specific Test (Paper–II) will have to appear for an interview to be organized by the respective Departments. At the time of interview, prospective candidates are expected to discuss their research interest/area. 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.
- 2.5. **The University will follow the rules of the reservation policy of Government of Maharashtra while granting admissions.**
- 2.6. **Scholarship/Fellowship:** candidates opting for full-time program can apply for scholarship to various funding agencies such as UGC/DST/AICTE/State Govt. etc.

3. 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.

4. Leave

- 4.1. 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. 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**)
- 4.2. 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.
- 4.3. 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.

5. The Research Committee

It shall consist of the following members:

- a.) Chairman, Board of Studies in the subject concerned (Chairman)
- b.) Head of the Department in the subject concerned
- c.) All teachers of the rank of Professor in the subject concerned
- d.) Two Associate Professors in the subject/area concerned nominated by the Academic Council for a period of three years.
- e.) All recognized Research Guides in the concerned research area.
- f.) At least ONE Subject Expert from the panel of minimum five subject experts nominated by the Academic Council for a period of three years.

In absence of the Chairman, senior most member present in the meeting will act as Chairman.

6. Allocation of Research Guide (Ph. D. Guide)

- 6.1. 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. The allotment/allocation of guide will not be left to the individual candidate or teacher.
- 6.2. 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. Any research guide shall not have more than eight research candidates from the University registered with him at any time.

- 6.3. 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. Provided further that, in specific cases co-guide (second guide) shall also be permitted for justified reasons. The decision of the research committee will be final.
- 6.4. A candidate may be allotted a co-guide (second guide) at a later stage (depending on the necessity to do so) who may be a recognized research guide belonging to the same Department or different Department of the University or being a research guide recognized by this University 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.
- 6.5. 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.
- 6.6. 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.

7. Place of Research

- 7.1. 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.
- 7.2. 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.

- 7.3. 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**)
- 7.4. 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.

8. Provisional Registration of the Ph. D. Candidates

- 8.1. 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.
- 8.2. All the provisionally registered candidates shall prepare a synopsis of proposed research work along with the title **within six 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.
- 8.3. 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.
- 8.4. 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.
- 8.5. 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.

9. Allotment of Course Work

The candidates will have to complete mandatory Pre-Ph. D. course work as mentioned in following sub-sections 9.1 to 9.3

- 9.1. After the allotment of provisional registration numbers and passwords all the candidates will be allotted one M. Tech 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. 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. 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**)
- 9.2. 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.
- 9.3. 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.
- 9.4. 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.
- 9.5. 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.
- 9.6. 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.
- 9.7. 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.

- 9.8. 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.
- 9.9. 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.

10. Tenure of Registration

- 10.1. 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.
- 10.2. 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.
- 10.3. The maximum period of registration for the Ph. D. candidate shall be eight years, after which the registration shall stand cancelled.

11. Cancellation of Registration

- 11.1. 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.
- 11.2. If the candidate is found to guilty of commissions and omissions amounting to misconduct like indiscipline, dereliction of duties unbecoming behavior, insubordination 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.
- 11.3. 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.

- 11.4. 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.

12. Submission of Biannual Progress Reports

- 12.1. 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. 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.
- 12.2. 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.
- 12.3. 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.

13. Annual Progress Seminar

The concerned guide of Ph. D. candidate will regularly monitor the progress of the candidates. The guides will place the biannual progress reports in the RC meeting. At the end of every academic year the candidate shall present his/her work before RC in which minimum two members of RC from subsection 5(d) and/or 5(f) must be present for the annual progress seminar. (*ANNEXURE – VII*)

14. Change of Title of the Thesis

- 14.1. 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.
- 14.2. If there is a major change in the title or the change involves an altogether different topic from what was registered, the candidate shall not be allowed submission of his thesis unless he/she works for four more terms i.e. minimum prescribed period of Ph. D. study from the date of grant of such permission. The Academic Council will approve the title of

the thesis on recommendation of research committee if there is change in the topic of research.

15. Pre-synopsis Seminar

- 15.1. 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**)
- 15.2. 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.

16. Submission of the Thesis

- 16.1. 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.
- 16.2. The candidate must have published at least one research paper in peer reviewed/ refereed international journal having impact factor one or more than one 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.
- 16.3. The candidate must submit in the FOUR copies of his/her Ph. D. thesis within two weeks of the submission of the copies of his/her synopsis 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.
- 16.4. 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.
- 16.5. 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.
- 16.6. 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 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. Where a candidates 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**.

17. On-line Processing of the Theses

- 17.1. 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. 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.
- 17.2. The Ph. D. candidate who have been provided with provisional registration number and password (as described in section 6.1) 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.
- 17.3. 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. 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. 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.
- 17.4. 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.
- 17.5. 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 appointed as per section 17.4, a reminder will be sent via e-mail by the system automatically.
- 17.6. 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.
- 17.7. 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.
- 17.8. 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.
- 17.9. 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.
- 17.10. 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. 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 (section 17.3 onwards) will be followed in the same order. The examiner thus appointed by the system will be hence forth termed as Examiner-3.
- 17.11. 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. 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.
- 17.12. 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 (section 17.3 onwards) 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.
- 17.13. In case Examiner-1 and Examiner-2 (and/or Examiner-3 in case appointed under section 17.10) 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.
- 17.14. 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. 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.

18. Viva-voce and Open Defense of the Ph. D. Thesis

- 18.1. Once the date of defense is fixed by the Controller of Examinations (as per provisions in section 17.11) and 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.
- 18.2. 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.
- 18.3. 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.
- 18.4. 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.
- 18.5. 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.
- 18.6. The Chairman of the open defense committee 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**)
- 18.7. 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.

19. Alternate System to grant a Ph. D. Degree

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. 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. 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.

20. Depository with University Grants Commission (UGC)

- 20.1. 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.
- 20.2. 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.

21. 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 Preparation of Thesis

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:
 - 1.1. the full title of the thesis and the subtitle, if any
 - 1.2. the full name of the author (candidate)
 - 1.3. Name of Ph. D. Guide
 - 1.4. the degree for which the thesis is submitted
 - 1.5. the name of the University and the name of the Department
 - 1.6. 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 round 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 M. M., 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, Lonere-Raigad

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 have No Objection for the same. We are pleased to
forward his/her application for admission to full-time Ph. D. program at Dr. Babasaheb
Ambedkar Technological University, Lonere-Raigad.

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

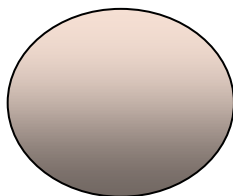
Date:

Signature:

Place:

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, Lonere-Raigad

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 at Dr. Babasaheb
Ambedkar Technological University, Lonere-Raigad.

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

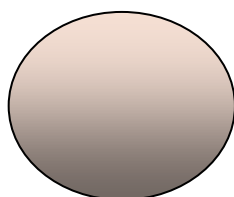
Date:

Signature:

Place:

Name:

Designation:



Seal of the Institute/ Organization/ University

ANNEXURE - IV

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

Date: _____

To

Head,
Department of _____,
Dr. Babasaheb Ambedkar Technological University,
Lonere-Raigad

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

Guide

Co-guide

Head of the Department

ANNEXURE - V
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: _____

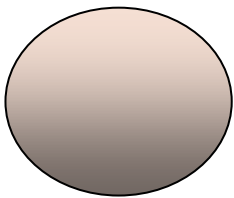
4. Major areas of activities (e.g. Biotechnology, CAD, etc.):

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

Course Registration Form

Dr. Babasaheb Ambedkar Technological University, Lonere-Raigad

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: 1. _____
2. _____

The Ph. D. candidate wish to join the M. Tech course titled _____
which is offered by the teacher _____ of _____
_____ Department in the academic year _____. We allow him to
take this M. Tech 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)

Guide

Co-guide, if any

Signature of Head of the Department

Copy to: Controller of Examinations

ANNEXURE - VII

Annual Progress Seminar 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. Biannual 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):*

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

15. Remarks of the Research 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:

Name and Signatures of the Research Committee /Evaluation Committee Members

- 1. **Subject Expert:**_____
- 2. **Subject Expert:**_____
- 3. _____
- 4. _____

Date:_____

Place: _____

ANNEXURE - VIII

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:

- 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 after the previous progress seminar till date:

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

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

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):

Name and Signatures of the Research Committee Members:

1. Subject Expert: _____

2. Subject Expert: _____

3. _____

4. _____

5. _____

Date: _____

Place: _____

ANNEXURE - IX

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 Guide

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 submit herewith 4 copies of the thesis, 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, Lonere-Raigad

ANNEXURE – X

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, Lonere-Raigad, is an authentic record of my own work carried out during the period _____ under supervision of _____ (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.

Guide

Co-Guide

ANNEXURE - XI

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, Lonere-Raigad 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 delete the clause which is not applicable)

Guide (Internal Examiner)

Co-guide, if any

External Examiner

Chairman

Date: _____

Place: _____

Forwarded to Controller of Examinations