BPUT PhD Regulations, 2023

[Comprehensive Rules and Regulations governing all Autonomous Colleges, Nodal Centre for Research and BPUT]

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BIJU PATNAIK UNIVERSITY OF TECHNOLOGY (BPUT), ODISHA, ROURKELA

REGULATIONS GOVERNING

THE DEGREE

OF

DOCTOR OF PHILOSOPHY (Ph.D.)

[Effective from10/10/2023]

(Approved by 41st Academic Council on 05/09/2023 and 45th Board of Management on 11/09/23)

These Regulations governing the award of Degree of Doctor of Philosophy (Ph.D.) have been framed to facilitate and regulate the PhD programme of all the affiliated colleges / Autonomous colleges / Nodal Centre for Research (NCR) in line with the provisions of the UGC (Minimum Standards and Procedure for Award of Ph.D. Degrees) Regulations, 2022. The major objectives of are to (1) introduce a uniform research policy to improve the quality of research in the Biju Patnaik University of Technology (BPUT), Odisha, and (2) to promote holistic research spirit among the Research Scholars and the Supervisors.

1.0 SHORT TITLE, COMMENCEMENT AND APPLICABILITY

- 1.1 These Regulations shall be called "BPUT Regulations Governing the Degree of Doctor of Philosophy (Ph.D), 2023".
- 1.2 These regulations shall come into force with effect from the date of its notification by the University and shall be applicable for the candidates seeking registration for Ph.D. in the Faculty of Engineering, Faculty of Architecture, Faculty of Computer Application and Applied Sciences, Faculty of Management, and Interdisciplinary subject areas of BPUT affiliated colleges, CUPGS, Autonomous Colleges and Nodal Research Centres of BPUT.
- 1.3 The Present Regulations, 2023 of BPUT shall supersede the rules and regulations framed by the respective autonomous colleges with immediate effect.
- 1.4 The University shall issue registration number to the candidates who were admitted by autonomous colleges prior to this regulation provided their

enrolments have been done in accordance with the BPUT PhD Regulations, 2019 and the UGC guidelines, 2016 after making case to case analysis.

1.5 All correspondences with the University regarding the Ph.D. programme, like Reports/ Presentation / Thesis shall be in English language only.

2.0 DEFINITIONS

In these Regulations unless the context requires otherwise or it is specifically so defined:

- a) AC means the Autonomous Colleges as notified by appropriate authority. Board of Studies (BoS)', 'Board of Management (BoM)', 'Faculty' mean the respective Authorities of the University.
- b) 'Doctoral Research Degree Committee (DRDC)' means a committee constituted by the University / AC / NCR to carry out the activities concerning the Ph.D. programme of BPUT.
- c) 'AICTE' means the All India Council for Technical Education established at New Delhi by an Act of Parliament.
- d) 'BPUT-ETR' means BPUT Entrance Test for Research conducted by the University for admitting students to the University / AC / NCR for the PhD programme
- e) 'College' means the Autonomous Colleges (AC) / Affiliated Colleges / Constituent colleges / CUPGS under this University.
- f) 'CoE' means Controller of Examinations of Autonomous Colleges /NCR
- g) 'Coursework' means the courses prescribed as a part of the Ph.D. programme, which the candidate shall successfully complete as a pre-requisite.
- h) 'Co-Supervisor' means the additional Research Supervisor who supervises / guides the doctoral research of a candidate along with the Research Supervisor.
- i) 'Degree at Undergraduate / Postgraduate / Doctorof Philosophy level' means UG / PG / Ph.D.
- j) DoE' means Director of Examination of the University (BPUT).
- k) 'Doctoral Scrutiny Committee (DSC)' means the Research Advisory Committee constituted by BPUT / AC / NRC as the case may be to review the research progress of a candidate enrolled for the Ph.D.

- 'Principal / Director' means the Head of the Institute of the AC / NCR
- m) 'FIP' means the Faculty Improvement Programme of UGC.
- n) 'Gol' means the Government of India.
- o) 'GoO' means the Government of Odisha.
- p) 'HoD' means Head of the Departments of NCR / AC
- q) 'Intake' means the number of students sanctioned for admission to BPUT / AC / NCR of the University in a year.
- r) 'Principal' means Principals / Directors of Autonomous Colleges / Nodal Research Centres (NRCs)
- s) NCR means Nodal Centre for Research fulfilling the criteria as mentioned in the BPUT, PhD Regulations, 2019 as approved by BPUT from time to time for Conducting PhD programme
- t) 'NRI/FN/PIO' means Non-Resident Indian / Foreign National / Person of Indian Origin in abbreviated form.
- u) 'Research Supervisor' means a qualified faculty member or a scientist recognized by the University to supervise/guide the candidates for Ph.D. in the year of admission of students.
- v) 'University' means the Biju Patnaik University of Technology, Odisha, Rourkela (BPUT) with its Head-quarters at Rourkela, Odisha.
- w) 'Vice Chancellor' means the Vice Chancellor (VC) of the University (BPUT).
- x) 'Viva-Voce Board' means a Committee of experts appointed by the University to conduct the final viva-voce on the Thesis submitted by the candidate.
- y) 'PIC (R&D)' means Professor in Charge, Research & Development of the University (BPUT).
- z) 'Website' means the website of the University at www.bput.ac.in/ Autonomous Colleges websites / websites of the NCR.

3.0 BOARDS AND COMMITTEES

3.1 Constitution of Boards / Committees

The University / ACs / NCR shall constitute the following Boards / Committees for monitoring the Ph.D. Programme:

- a) Doctoral Research Degree Committee (DRDC)
- b) Doctoral Scrutiny Committee (DSC)
- c) Viva Voce Board
- d) Such other Boards/Committees, as may be required.

The composition, duties and responsibilities of the Boards and Committees shall be as given below:

3.1.1 Doctoral Research Degree Committee (DRDC)

a. The Doctoral Research Degree Committee (DRDC) of BPUT shall be constituted by the Vice-Chancellor comprising following members:

i.	Dean of the Faculty	Chairperson
ii.	One Nominee of the BoM of BPUT	Member
iii.	One nominee of the Academic Council	Member
iv.	Two nominees of the VC	Member
٧.	Registrar (Ex-Officio)	Member
vi.	Director Examinations, BPUT	Member

vii. Professor I/C, Research, BPUT Member Convener

- b. The nominees shall be in the rank of Professor of Government Colleges or equivalent rank scientist of R&D organizations.
- c. Presence of four members in the DRDC meeting shall be required to form the quorum.
- d. If the Dean is not available due to some reason or other, then the Vice Chancellor may nominate a senior professor to chair the DRDC meeting.
- e. The Principals of Autonomous Colleges / NCR shall constitute similar DRDCs at their Institutions in the name and style as 'Institutional DRDC (IDRDC)' by including the concerned Dean of the University to the Committee as member. The Principal shall act as the Chairperson and conduct meetings of the IDRDC at least twice a year for monitoring the research activities of the candidates enrolled in the College. Principal shall make all correspondences with the University only after discussion with the IDRDC members.
- f. The DRDC of the University shall be responsible for:
 - i. Conduct of BPUT Entrance Test for Research (BPUT-ETR).
 - ii. Preparation of merit list(s) of successful candidates.
 - iii. Identification and notification of intake of Scholars per supervisor.
 - iv. Following Reservation Policy.

- v. Recognition of & Selection of Research Supervisor / Co-Supervisors.
- vi. Facilitating/Conducting Pre-Enrolment interview.
- vii. Selection of candidate for taking up research.
- viii. Conducting such other tasks connected with the admission of the candidate
- ix. Resolving conflicts between the candidates, supervisor & others (if any).
- x. Any other matter as may be referred by the Vice Chancellor

3.1.2 Doctoral Scrutiny Committee (DSC)

- a. There shall be DSC for each candidate enrolled at BPUT/ AC / NCR which shall perform the prescribed functions for the conduct of the Ph.D. programme. The proposed supervisor shall submit list of six domain experts in the rank of Professor / Associate Professor to act as DSC Members in the prescribed format to the concerned Professor in Charge of R&D of BPUT/ AC/ NCR.
- b. The list shall be presented before the Vice Chancellor / Principal for nomination of two domain experts to the DSC.
- c. The DSC shall comprise of
 - i. Head of the concerned Department.
 - ii. Two domain experts to be nominated by Vice Chancellor / Principal
 - iii. One member (outside of the department where student is enrolled)
 - iv. Research Supervisor as Member Convener
 - v. Co-Supervisor (if any) as Joint Member Convener
- d. The senior most Professor present shall act as the Chairperson of the DSC meeting and three members including two experts present in the meeting shall constitute the Quorum.
- e. The Doctoral Scrutiny Committee (DSC) shall be responsible to review and monitor the progress of the candidate in Ph.D. research work from its commencement till submission of the Thesis. The Committee shall meet as often as required, but at least once in every six months. Also, the DSC may have the same composition for all the candidates registered under one Research Supervisor.
- f. The Vice-Chancellor/Principal of AC/ NCR may appoint alternate domain Expert(s) to the Committee in consultation with the Head of the

department, if any in case any member is unable to attend the DSC meetings.

- g. All the expenses related to the functioning of the Doctoral Scrutiny Committee shall be met by the BPUT / AC / NRCs as the case may be.
- h. BPUT/ AC/ NRCs shall maintain personal records for each candidate separately with all details of the Research scholar's progress, minutes of DSC meetings, correspondence with University, Fees paid, Course work & grade sheet, copy of applications, enrolment, registration and admission information etc.
- i. The DSC shall submit a list of experts not below the rank of Professor/ Associate Professor to the Vice-Chancellor for the evaluation of thesis, as and when the candidate is ready to submit his/her thesis at BPUT. The concerned DSC of AC / NCR shall however, submit the list to the Vie–Chancellor through the Principal concerned of the ACs / NRCs.
- j. The DSC shall also perform such other duties as indicated elsewhere in this Regulation.

3.1.3 Viva-Voce Board

- a. The Vice-Chancellor shall constitute Viva-Voce Board for each candidate belonging to BPUT/ ACs / NRCs soon after receipt of favourable Reports on the thesis from all the Adjudicators. It shall have the following composition:
 - 1. Senior most Professor of the DSC (as Chairman)
 - 2. All DSC Members (as Member)
 - 3. Identified Adjudicators (as Member)
- b. The Board shall conduct the final open defense viva-voce for the candidate to defend his/her Ph.D. thesis at BPUT / AC / NCR.

3.1.4 Other Boards and Committees

- a) The Vice Chancellor may constitute any other Boards / Committees in connection specific requirements in the conduct of the Ph.D. programme.
- b) The duties / responsibilities and other details of these Boards / Committees shall be notified by the University as and when they

are constituted.

4.0 FACULTY OF RESEARCH PROGRAMME

4.1 List of Faculties

The University shall permit the registration for Ph.D. in the following Faculties, namely,

- a) Faculty of Engineering
- b) Faculty of Architecture
- c) Faculty of Computer Application and applied science
- d) Faculty of Management

4.2 Inter-Disciplinary Subject Areas

A candidate may be allowed to pursue Ph.D. research in a subject area of inter-disciplinary nature in the same Faculty in which the candidate has obtained the PG degree or across two or more Faculties in the University, with approval of Vice Chancellor.

4.3 Eligibility of AC/ NRC to admit students for PhD programme in different faculties:

- No autonomous college or nodal research centres shall offer PhD programme without having a Post Graduate department in the relevant faculty, and
- ii) At least two regular faculty members satisfying the eligibility norms to be recognised as Research Supervisor of the University are available in the PG Department, and
- iii) The Department must have completed three academic years in which two batches of students should have passed.
- iv) In case there are no students admitted in the academic year, the AC / NCR shall not take candidates for PhD in the said Department.

5.0 ELIGIBILITY FOR ADMISSION

5.1 Eligibility Requirements

The eligibility requirements for candidates to get admitted to the Ph.D. programme shall include the following:

5.1.1 Categories of Candidates and Other Requirements

The following categories of candidates shall be considered for admission to Ph.D. programme:

- a. Full-Time: Candidates including QIP/FIP / NDF scholars/ UGC-NET (including JRF)/UGC-CSIR NET (including JRF) / SLET /GATE / CAT (fellowship qualities) may pursue PhD on full time basis.
- b. Part-Time: In-service candidates having a minimum professional experience of one year after their PG Degree/ or from among the regular faculty members working in any Engineering College / Polytechnic / Govt. R&D Organization / UGC-recognized University / Deemed to be University (recognized / accredited by appropriate bodies in India) or research staff of public / private organizations / Executives of Corporates / Industries shall be eligible to pursue Ph.D. research on a part-time basis.
- c. Candidates with MBA and MCA Degrees obtained through distance mode from UGC/DEC approved institutions may be allowed to enroll for Ph.D. as per UGC / AICTE norms.

5.1.2 Study leave / Employment Clearances / NOC from Sponsoring Institution

- a. Employed candidates, who take up Ph.D. Programme on full-time basis, shall produce No-objection certificate (NOC) from their employer / organization(s) with a sanctioned study leave for a minimum period of three years with full salary in the university prescribed format.
- b. Unemployed Candidates who take up Ph.D. programme on full-time basis shall not be allowed to take up any employment during such period of Ph.D. work. However, they can apply for scholarship / fellowship / stipend/ assistantship, if any, with intimation to the University.
- c. The part-time scholars shall have to submit a NOC from the respective employer.

5.1.3 Special Leave for Woman Ph.D. Scholars

The woman candidates can avail of Maternity Leave/Child Care Leave of up to 240 days once in the entire duration of Ph.D. programme. The scholars have to submit an application to claim this facility in prescribed

format.

5.1.4 Minimum Qualifications requirement

The minimum academic qualifications required for seeking admission to the Ph.D. Programme, shall be as given below in respect of the different Faculties.

5.1.5 Faculty of Engineering

The candidates shall possess a Master's Degree in Engineering / Technology or equivalent or M.Sc. (Engineering) by Research degree from the University or any other University recognized by it, with a minimum CGPA of 6. 5 out of 10 or 60% aggregate marks at the Master's Degree.

5.1.6 Faculty of Architecture

The candidates shall possess Master's Degree in Architecture / allied specialization or equivalent recognized by the University, with a minimum CGPA of 6.5 out of 10 or 60% aggregate marks at the Master's Degree in the respective discipline.

5.1.7 Faculty of Computer Application and Applied Sciences

The candidates shall possess a Master's degree in Computer application / Computer Science / Physics / Chemistry / Mathematics and such other allied disciplines, recognized by the University with a minimum CGPA of 6.5 out of 10 or 60 % aggregate marks at the Master's Degree.

5.1.8 Faculty of Management

The candidates shall possess MBA / PGDM Degree from a recognized University / AICTE approved institutes with a minimum CGPA of 6.5 out of 10 or 60% aggregate marks at the Master's degree.

5.1.9 Inter-Disciplinary Subject Areas

The candidates desirous of pursuing Ph.D. in subject areas of interdisciplinary nature shall fulfill the following eligibility requirements:

 a) The candidate shall possess the Master's Degree in appropriate branch / subject / discipline recognized by the University, with a

- minimum CGPA of 6.5 out of 10 or 60% aggregate marks.
- b) The candidate shall submit the title of the research area and the research
 - proposal of inter-disciplinary nature along with his/her application for admission.
- c) The research area / proposal should have / positive recommendation of the DRDC / IDRDC.
- d) The candidates may undergo research in inter-disciplinary subjects in which he/she has obtained PG and has registered for the PhD programme in the said faculty.

5.1.10 Relaxation of Minimum Requirements

A candidate belonging to SC / ST / differently-abled as notified by Government of Odisha from time to time shall have relaxation of 5% marks or equivalent grade in the minimum prescribed qualification at the PG level.

6.0 RECOGNITION OF RESEARCH SUPERVISOR /CO-SUPERVISOR

6.1 Procedure for Recognition of Research Supervisor / Co-supervisor

- a) The Professor in charge R&D Cell of BPUT shall initiate actions for recognition of Supervisor / Co-supervisor.
- b) The Supervisor must be a full time faculty member of the CUPGS of BPUT or Constituent Colleges, Affiliated Colleges having PhD degree in the concerned / allied subject.
- c) Guest / Part-time faculty members are not eligible to be Supervisor. However, such Guest faculty / Part-time faculty members can be considered as Co-Supervisor provided they fulfil other prescribed conditions.
- d) The University shall invite applications periodically through its website by notification, from eligible faculty members, scientists and others for being recognized as Research Supervisors / Co-Supervisor through online mode every year (on the 1st week of July every year). The eligible faculty members / experts must submit their applications along with all requisite documents online within the prescribed date.

- e) Scrutiny committees with the respective Deans as Chairperson and Professors of Government Colleges / Institutes as members under each Faculty shall be constituted by the Vice-Chancellor to verify the applications received.
- f) The Committee shall recommend the names of those fulfilling the requirements to act as Research Supervisors / Co-supervisor to the Vice Chancellor for approval. The entire process should be completed in the month of **September** and the list of Research Supervisors /Co-supervisors along with their research areas and number of scholars shall be published on the University website in the **last week of September** every year.
- g) Upon recognition, the regular Faculty Member belonging to BPUT shall become eligible to supervise the Ph.D. candidates of the University. Others found eligible may act as Co-supervisors.
- h) Ordinarily, the maximum age for taking new scholars by a Supervisor is 65 years. However, Vice-Chancellor, in very special circumstances shall have the discretion to relax such provision for the greater interest of the University.

6.2 Eligibility Criteria for Recognition as Research Supervisor

- a) Regular faculty members working as Professor/Associate Professor in an autonomous colleges/ NCR/ affiliated / constituent college / PG centre of BPUT with PhD are only eligible to be considered as Research Supervisor provided he /she has not attained the age of 65 years, and he / She must have at least **Five research papers** published in Scopus indexed / UGC CARE / ABDC listed journals. However, Vice-Chancellor, in very special circumstances shall have the discretion to relax such provision for the greater interest of the University.
- c) Regular faculty members working as Assistant Professors with a Ph.D in an Autonomous college / NCR / affiliated / constituent college / PG centre of BPUT, and not having attained the age of 65 years, and having at least three research publications in Scopus indexed / UGC CARE / ABDC listed journals shall be eligible to act as a Research Supervisor in the University. However, Vice-Chancellor, in

- very special circumstances shall have the discretion to relax such provision for the greater interest of the University.
- d) A full-time regular Scientist working in a Govt. research organization / industry shall also be eligible for recognition, provided he/she has:
 - (i) Ph.D. degree from a recognized University in the relevant discipline(s).
 - (ii) A minimum of three research papers Scopus indexed / UGC CARE / ABDC listed journals.
- e) Faculty members fulfilling the criteria to be Supervisor in interdisciplinary areas from other departments of the same institution or from other related institutions of higher learning / Govt. R&D organizations can be declared as Co-Supervisor with the approval of BPUT.
- f) A person awarded with a Ph.D. degree from Foreign University shall submit an equivalence certificate from UGC / Association of Indian Universities to be recognized as Research Supervisor / Co-Supervisor under BPUT as per UGC Regulation. However, the VC has the discretionary power to recognize a faculty member as supervisor/co-supervisor based upon the recommendation PIC R&D subjected to the fulfilling of aforementioned eligibility criteria in special circumstances.

6.3 Other requirement of Research Supervisor

- a) In the case of interdisciplinary subject area(s), a candidate may have two supervisors, of which one shall be designated as the Research Supervisor and the other as the Co-Supervisor
- b) No Research Supervisor / Co-Supervisor shall supervise his/her close relative or spouse for Ph.D. Degree of BPUT.

7.0 INTAKE STRENGTH PER RESEARCH SUPERVISOR

7.1 Number of Candidates per Research Supervisor

- a) Each Research Supervisor / Co-Supervisor shall supervise/guide at a time, not more than:
 - (i) Eight candidates if he/she is a Regular Professor with at least 10 years teaching experience / a Scientists of equivalent rank with 10 years of experience in AICTE / UGC

/ Govt. recognized institute / Govt. R&D Centres.

- (ii) Six candidates if he/she is a regular Associate Professor with 5 years of teaching experience in AICTE /UGC / Govt. recognized institute / a Scientist of equivalent rank with at least 05 years research experience in any Govt. R&D Organization.
- (iii) Four candidates if he/she is a regular Assistant Professor / a scientist of equivalent rank working on permanent basis in a Govt. R&D Centre.
- (iv) The maximum number of intake as above for the Faculty members shall be subject to the compliance of provisions of SC / ST / Differently abled persons / QIP / FIP etc as notified by UGC / Government / BPUT from time to time.
- (v) While computing the number, the candidates registered under the same Research Supervisor at other Universities, if any shall be counted. The concerned Supervisor / Co-Supervisor shall furnish undertaking in this regard.
- b) Any violation of these norms/ procedure shall result in the University taking serious steps like de-recognition of the AC / NCR and the Research Supervisor.
- c) The seats reserved for SC/ST / Differently abled candidates shall be mutually interchangeable as per UGC norms, but not transferrable to the General Pool.
- d) A Research Supervisor/ Co-Supervisor shall not be assigned more than 4 candidates during an academic year.
- e) However, Vice-Chancellor, in very special circumstances shall have the discretion to relax intake strength of Research Supervisor for the greater interest of the University.

8.0 ADMISSION PROCESS FOR THE PhD PROGRAMME

8.1 University Notification

The University shall issue notification in its official website and in two newspapers (one in Odia and one in English) inviting application in

online mode for admission to Ph.D twice in an academic year preferably in the month of **October / April** every year (for the admission in **January/July** depending on availability of vacancy in that particular year). The following information shall be available in the website.

- (i) The procedure to be followed for Ph.D. admissions;
- (ii) Eligibility requirements, to be satisfied for getting admitted;
- (iii) Number of seats to be filled branch/ subject area-wise;
- (iv) Division of seats to be filled in the general and the reserved categories;
- (v) BPUT-ETR details-Dates, Times, Centers, etc., and Application Procedure.
- (vi) Calendar for pre-enrolment interview, semesters, other events;

8.2 Invitation of Application

- (i) The BPUT ETR shall be a centralised one for BPUT / AC / NCR.
- (ii) The DOE of BPUT shall initiate actions to issue advertisement in the newspapers and BPUT Website inviting applications from candidates desirous of pursuing PhD in BPUT / AC / NCR.
- (iii) All eligible candidates satisfying the qualification requirements shall submit their applications for admission into Ph.D. programme of the University in the prescribed format (through online mode) along with fees and necessary documents; viz., attested copies of degree certificate(s), marks / grade sheets of all the related examinations, employer's certificate if employed, category certificate, and such other documents as may be notified.

8.3 Role of Director of Examinations

On receipt of applications, the DOE shall arrange for

- (i) Scrutinizing the applications to determine the candidate's eligibility, including eligibility for exemption from the BPUT-ETR'
- (ii) Conducting the BPUT-ETR in online mode at identified Colleges and getting the answer scripts evaluated;
- (iii)Declaration of ETR result in order of merit of the qualified candidates based on the score in the written component and shall forward the list of qualified candidates to PIC, R&D for follow

8.4 Conduct of BPUT-ETR

- a) The BPUT-ETR shall be held preferably on a 3rd Sunday of November / May at notified Centres.
- b) All the eligible applicants shall appear for the BPUT-ETR to determine the candidate's aptitude for research. The score obtained by the candidates in the BPUT-ETR shall form the basis for preparing the merit list of successful candidates.
- c) Separate merit lists shall be prepared for the General and Reserved category candidates and notified on the website of BPUT website.
- d) The BPUT-ETR shall consist of 70 question (MCQs) (35 on Research Methodology and 35 specified on Subject) of one mark each.
- e) The duration of BPUT-ETR test shall be of 120 minutes.
- f) Only those candidates scoring 35 marks or more in the BPUT-ETR (for General category candidates) and >=30 marks (in the case of Reserved category) shall be short listed for being called for the pre-enrolment interview.

8.5 Exemption from BPUT-ETR

The following categories of candidates may be exempted from appearing at BPUT-ETR.

- (i) Faculty members selected under QIP / FIP subject to availability of QIP centres under BPUT
- (ii) Candidates selected under ADF.
- (iii) Candidates qualified in the UGC-NET (including JRF)/UGC-CSIR NET (including JRF) / SLET /GPAT/ GATE/ CAT (fellowship eligible) or other similar national tests and having qualifying percentile scores in their respective validity periods;

8.6 Eligibility for Pre-Enrollment Interview

a) All Candidates who are successful in BPUT-ETR and those from the exempted categories shall appear at the pre-enrollment interview.

b) However, candidates under QIP / FIP shall be considered for admission on a case by case basis by following AICTE / UGC directions and as per availability of seats.

8.7 Role of PIC, R&D, BPUT

- a) Formation of Expert Committee: The PIC shall obtain the approval of the Vice-Chancellor for constitution of the Expert Committees consisting of two experts for each subject area including the Dean of the respective faculty (in which the candidates are being considered for admission) to conduct the pre-enrolment interview of the shortlisted candidates. The PIC shall act as the Member convener of the committee.
- b) The PIC shall hold the interview(s) at convenient location such as BPUT HQR/ Constituent colleges. The date, time and venue shall be notified through University website. (No individual notice shall be sent to candidates).
- c) The PIC shall prepare the final merit list by combining marks scored by the candidate in the ETR and Pre-enrollment interview.
- d) The Expert Committee shall judge the candidate's knowledge and experience in the subject area concerned and his/her preparations to take up the proposed research work.
- e) The interview shall be for 30 marks and the pass mark shall be 15 (fifteen) for all categories of candidates.
- f) Only those candidates successful in the pre-enrollment interview shall be considered for preparation of Final Merit list
- g) Such candidates in the final merit list shall be considered for provisional enrollment as students for Ph.D. subject to availability of vacancy / slots under the Research Supervisors.
- h) The candidate(s) failing in the interview shall not be eligible for Ph.D. admission.

8.8 Separate Final Merit Lists

 a) The total score of BPUT-ETR and Pre-Enrolment Interview shall be considered for preparation of separate final merit list for all the General, Reserved Category and Exempted Category candidates

- shall be prepared by the PIC.
- b) Candidates who have cleared the national tests shall be placed in separate lists in order of their merit in the pre-enrolment interview.
- c) The PIC shall, with the approval of Vice-Chancellor notify the Final merit list of successful candidates on BPUT website within two weeks from the date of completion of Pre-enrollment Viva.
- d) Only the selected candidates in the Final merit list shall be considered for filling the existing vacancies through enrollment at the respective BPUT / AC / NCRs.
- e) The Candidates are free to take admission for PhD either at BPUT / AC / NCR.
- f) The merit list shall remain valid for two years within which time the candidates shall have to enrol or else the candidature shall expire on completion of two years.

8.9 Provisional Enrollment:

- i. The successful candidate shall interact with the proposed Research Supervisor (from the BPUT approved list of supervisors) in his / her area of research and finalise his/her research proposal.
- ii. Depending upon the existing vacant slot of the Research Supervisor in the relevant category, available specialization, research interest of scholar etc. the research proposal of the candidate shall be confirmed under the Supervisor.
- iii. He / she shall submit his/her application to the PIC (R&D) of BPUT in prescribed format with due signature of the proposed Research Supervisor concerned for provisional enrolment to the Ph.D. programme at BPUT.
- iv. A candidate desirous of pursuing research at Autonomous college or Nodal Centre for Research shall submit his /her application in prescribed format to the Principal of the concerned Autonomous college or Nodal Centre for Research with due signature of the proposed Research Supervisor concerned for the purpose of provisional enrolment.
- v. He / she shall submit the prescribed enrollment fees and other

- documents duly countersigned by his / her proposed Supervisor at the BPUT or at the respective AC / NCR for verification. The prescribed fees shall be deposited in shape of DD.
- vi. PIC, R&D of BPUT or the Principal of the AC / NRC concerned shall convey the provisional enrollment to the candidate under the Research Supervisor.
- vii. Each candidate shall have to seek admission only in such branch of major discipline for which the department concerned is recognized by the University to impart PG studies and the requirements of Faculty and PG students are fulfilled.

8.10 Course work to be prescribed by Doctoral Scrutiny Committee

- Once the DSC is formed, the Supervisor shall arrange for convening a meeting of the DSC members to prescribe coursework for the candidate concerned.
- ii. The coursework shall be conducted at the CUPGS, BPUT/ GCE, Keonjhar / GCE Bhawanipatna / PMEC, Berhampur / CIME, Bhubaneswar or IMIT, Cuttack for the students joining the BPUT directly. The candidate shall deposit prescribed fees with the college concerned for undergoing the coursework there at.
- iii. Principal of the AC / NCR where P.G Level teaching is available befitting to the subjects proposed by the DSC shall only conduct the Coursework in their own department.
- iv. The candidate concerned shall join coursework programme at the AC / NCR on payment of prescribed coursework fees to AC / NCR in shape of DD.
- v. The scholars can also carry out their coursework on a particular subject under SWAYAM, NPTEL, MOOCS etc. only with the approval of the DSC. The scholar shall have to submit the grade card issued by the concerned authority to BPUT / AC / NCR as an evidence of their completion of the coursework in the subject concerned.

9.0 CHANGE OF RESEARCH SUPERVISOR / INCLUSION OF CO-SUPERVISOR

- I. The request by a candidate for change of Research Supervisor / Co-Supervisor and inclusion of Co-Supervisor shall be permitted by the Vice Chancellor/Principal AC/NRC as per vacancy with intimation to BPUT.
- II. In other cases, like transfer, retirement or resignation of the Research Supervisor / Co-Supervisor six months before the candidate's submission of the thesis, the Principal of BPUT-AC shall normally permit the candidate to continue to work under the same Research Supervisor / Co-Supervisor or in exceptional cases, make an alternative arrangement with the recommendation of the Doctoral Scrutiny Committee.
- III. In the event of inclusion of a Co-Supervisor after Ph.D registration of the candidate, Thesis can be submitted only after completion of **01** year from the date of such inclusion of Co-Supervisor.
- IV. Handling of Conflict: In the case of any conflict between the Research Supervisor and/or Co-Supervisor and the research scholar, it shall be resolved at institutional level. However, if this conflict is not resolved, then it may be referred to the DRDC of BPUT. The DRDC shall submit its views to VC as early as possible. The decision of the Vice Chancellor shall be final and binding on all concerned in this regard.

10.0 COURSEWORK AND CORSEWORK EXAMINATION

10.1 Coursework Assignment by DSC

- a) Each candidate provisionally enrolled for the Ph.D. programme shall have to go through the prescribed coursework for a total of 14 to 16 credits. The subject namely "Research Methodology" carrying 04 credits and "Publication and Research Ethics" carrying 02 credits are compulsory. The remaining coursework of 8 to 10 credits shall pertain to such PG level studies as decided by the Doctoral Scrutiny Committee.
- b) All Courseworks shall be conducted by the concerned BPUT/AC/NRCs for the candidates at the approved centres.
- c) The coursework syllabus in each case shall be of Master Degree

- level courses in the relevant areas as approved by DSC and available in the BPUT course curriculum.
- a) Candidates shall submit their applications in the prescribed format together with the prescribed fees at the college concerned for undergoing Coursework at the approved colleges
- b) Similarly, the AC / NCR shall conduct the coursework in the Department concerned on receipt of applications and prescribed fees form the candidate.

10.2 Coursework Examination:

- At the end of the coursework, the DOE shall conduct Coursework examinations for theory papers as may be notified in the BPUT website.
- ii. Each theory paper of the coursework shall be of 100 marks comprising 40 marks for internal and 60 marks for external exam. The internal marks shall be awarded by the college concerned.
- iii. The Coursework examination shall be of Post graduate standard.
- iv. The DOE / COE shall conduct the examination on Coursework for Ph.D student along with the Master's Degree Students.
- v. The candidate obtaining a minimum of 60 marks (both internal and external combined) in each course registered shall be declared as Pass. Candidate securing less than 60% marks shall be required to pass in each course within a maximum of two consecutive attempts i.e. within one year in two semesters of enrolment, which may be extended to one more year with recommendation of DSC.
- vi. The enrolment of candidates failing to fulfil the above requirements shall be automatically cancelled.
- vii. The DoE / COE shall issue Grade sheet(s) to the candidates who pass the coursework, by following the letter grade norms of the University.
- viii. The COE of the AC / NCR shall follow the standard procedure to set questions and evaluate the answer scripts of the candidates and declare the result of the candidates.
- ix. The coursework shall be completed and cleared by each candidate with a minimum of 60% marks in each course within two years from the date of enrolment.

11.0 REGISTRATION FOR PhD PROGRAMME

11.1 Recommendation of DSC for Ph.D. Registration

- After successful completion of Coursework, the Supervisor shall arrange for a Registration Seminar to finalise the Research Topic by the Doctoral Scrutiny Committee (DSC).
- II. Thereafter, the DSC shall recommend to the BPUT / AC / NCR for issuance of Registration by the University.
- III. BPUT shall issue Registration Number to all the candidates whether he /she opts for enrolment directly under BPUT or in any AC or NCR.

11.2 BPUT to issue Notification on Registration to Ph.D.

- a) The University shall issue a notification of Registration based upon the recommendation of DSC and on receipt of Registration fees from the candidate.
- b) The Principal of AC / NCR shall forward all the documents such as completion of Coursework, Result sheet etc. in respect of each candidate to the PIC, BPUT along with the prescribed fees for the purpose of issue of Registration Number in favour of the candidate.
- c) On receipt of the document and fees from the candidate / college, the PIC, BPUT shall initiate steps for taking approval of Vice-Chancellor, and thereafter the Director Examinations shall allot Registration Number to the candidate. Further, PIC shall issue Notification specifying clearly the date from which the candidate's registration for the Ph.D. programme shall take effect.
- d) The candidate shall henceforth be regarded as Research scholar of the University.

12.0 PERIODIC REVIEW BY THE DOCTORAL SCRUTINY COMMITTEE

12.1 Procedure for Review

a) The Doctoral Scrutiny Committee shall periodically review the

- research progress of the Candidate, once in every six months until the submission of the Thesis.
- b) Each candidate shall submit a research progress report in the standard format through the Supervisor to the Doctoral Scrutiny Committee, two weeks prior to the schedule date of the meeting. Research papers prepared/published, if any, shall also be submitted.
- c) The candidate shall make a presentation showing his / her research progress before the Doctoral Scrutiny Committee. The Doctoral Scrutiny Committee shall communicate the satisfactory research progress or otherwise of the candidate to the PIC, R&D, BPUT or the Principal of the AC / NCR as the case may be.

12.2 Cancellation of Enrollment & Registration

- a) The DSC shall be free to recommend the cancellation of Ph.D. registration of the Scholar if,
 - (i) Two consecutive research progress reports are not satisfactory, or
 - (ii) The candidate is irregular in his/her research, or
 - (iii) Two consecutive research progress reports have not been submitted:
- b) Before recommending cancellation of Rregistration, the Doctoral Scrutiny Committee shall give an opportunity of being heard to the Scholar.
- c) In case the DSC is not satisfied, it may give the Scholar a last and final opportunity to improve his / her performance failing which the DSC may proceed with its recommendation of cancellation of the PhD Registration of the Scholar,
- d) If a scholar requests for discontinuation it may be permitted by BPUT / AC / NCR under intimation to the University.
- e) PhD registration of a scholar may be cancelled by the university under any of the following circumstances without calling for any explanation from the Scholar:
 - (i) Report of negligence in Research and non-interaction with the Supervisor and poor progress in research.

- (ii) Failure to pay the Semester Fees to the BPUT / AC / NCR for two consecutive semesters.
- (iii) If the scholar fails to submit his/her thesis or does not complete his/her thesis beyond the maximum prescribed period.
- (iv) If the scholar fails to submit a satisfactory reply to the explanation called for from him / her within a month from date of receiving the notice.
- (v) However, the Scholar shall be free to appeal to the Vice-Chancellor with valid reasons for favourable consideration. The decision of the Vice-Chancellor in this regard shall be final and binding for all.

13.0 PRE-SUBMISSION SEMINAR AND SUBMISSION OF THESIS

- a) The Scholar on completion of his / her research work and publication of research articles shall organise a DSC meeting through the Supervisor where the scholar shall make a presentation of the research work undertaken. Faculty members of the college are allowed to participate in such pre-submission seminar.
- b) If the performance of the Scholar in the pre-submission seminar is not satisfactory, the DSC may point out the deficiencies, if any and advise the scholar to remove / address the deficiencies.
- c) The scholar shall make a presentation once again within three months after rectifying the defects.
- d) On satisfactory performance at this stage, the Doctoral Scrutiny Committee may allow the Scholar to submit the Ph.D. thesis.

13.1 Mandatory Publications requirements before Thesis Submission

- a) Each candidate shall publish a minimum of two research papers as the first author or corresponding author in Scopus / SCI indexed / UGC-CARE / ABDC listed journals (all publications should be unpaid) before going for the pre-submission seminar and produce evidence for the same in the form of reprint or acceptance letter from the Publisher(s) of the Journals.
- b) Papers published prior to the enrollment shall not be counted for this purpose.

- c) The scholar shall invariably mention BPUT, Rourkela alongwith the name of the college as affiliation in all his/her publications.
- d) The DSC shall verify all the above said publication requirements before recommending pre-submission seminar / Thesis submission. The DSC shall submit a declaration in prescribed format.

13.2 Anti-Plagiarism Check before submission of the thesis

- The candidate's thesis shall undergo plagiarism check as per the norms of BPUT.
- ii. The plagiarism shall be checked by software approved by BPUT and the percentage of plagiarism (similarity Index) shall not exceed 10%. The similarity index from a single source (other than author's publication) shall not be exceeding 3%.
- iii. The similarity index must be verified by taking 14 consecutive words from a single source and by excluding Bibliography, tables of contents, references and publications of scholar relevant to PhD thesis.
- iv. Both the Candidate, Supervisor, Co-supervisor shall certify and submit the soft copy and hard copy of the Plagiarism Test report along with the Synopsis.

13.3 Permission for Submission of Thesis

- i. The DSC shall consider the research work of the Scholar, his / her performance in the pre-submission seminar, and subject to fulfilling other publications requirement, deposit of fees etc., shall allow the Scholar to submit thesis to the PIC, BPUT within the prescribed time limit of maximum two months.
- ii. Similarly, DSC at the AC / NCR shall allow the candidate to submit thesis at the respective colleges after completing rest other formalities.
- iii. The Scholar and the Supervisor shall obtain necessary clearance from the BPUT / Principal AC / Head NCR prior to submitting the thesis copies as the case may be. All necessary documents including the recommendation of the DSC, plagiarism report etc. shall be furnished to PIC / Principal, AC / NCR for obtaining necessary approval and clearance to submit the Thesis copies.

iv. After obtaining permission from the BPUT / Principal of AC / NCR, the Scholar shall submit his/her thesis to the PIC, BPUT / Principal of AC/ NCR as the case may be.

14.0 DURATION OF THE Ph.D. PROGRAM AND REGISTRATION VALIDITY

14.1 Payment of Registration fees

During the period when the registration of the candidate is in force, the candidate shall have to pay the prescribed Semester fees to the University / AC / NCR at the notified time intervals. The Scholars shall be liable to pay the Semester fees from the date of issue of the Registration letter in their favour.

14.2 Minimum Period for Submission of Thesis

Research Scholars shall be normally eligible for submission of the thesis after a minimum period of two years from the date of registration.

14.3 Maximum Period for Submission of Thesis

- a) The maximum period for submission of the Ph.D. Thesis by the Scholars shall be six years from the date of registration. The total duration of the PhD program shall not exceed 8 (eight) years from the date of the provisional enrolment
- b) The University shall give an additional relaxation of two years to women and persons with disability (>40% disability) Ph.D Scholars. However, the total duration should not exceed 10 (ten) years from the date of issue of provisional enrolment.

15.0 EVALUATION OF THESIS

- a) After getting the clearance from the PIC, BPUT / Principal AC / NCR for submission of thesis, the Scholar shall submit 5 (five) Abstracts, 5 (Five) Soft bound copies and one e-copy of the Ph.D. thesis to the PIC, BPUT/ COE, AC / NCR within the time limit of 2 months.
- b) In case the candidate is unable to submit the thesis within Two months from the date of pre-submission presentation, he/she shall be free to seek extension of one month more from the PIC, BPUT/ Principal AC / NCR with due recommendation of the Supervisor

15.1 Selection of Adjudicators and dispatch of thesis

- a) The Supervisor shall submit a list of 8 (eight) Adjudicators in the rank of Professors / Associate Professors of other reputed Universities/ Institutes of National importance outside Odisha in the prescribed format duly signed by the DSC members present on the day of Pre-Submission Seminar. The list of Expert Adjudicators shall be put in a sealed cover and shall be handed over to the PIC, BPUT. The Doctoral Scrutiny Committee (DSC) shall provide names of 02 Experts from abroad over and above 8 experts.
- b) In case of AC /NCR the list shall be handed over to the respective Principal for onward transmission to the PIC, BPUT. The Doctoral Scrutiny Committee (DSC) shall provide names of 02 Experts from abroad beyond 8 experts.
- c) The DSC shall ensure that complete postal address, e-mail ID, Mobile, Telephone numbers and the broad area of specialization of each adjudicator are provided in the list.
- d) On verification of the documents, the PIC shall forward the Sealed Cover to the DOE who shall present the list of adjudicators to the Vice Chancellor.
- e) The Vice-Chancellor shall select two adjudicators from the suggested panel for adjudication of the thesis. VC may suggest two names outside the panel, if he so desires. DOE shall communicate the names of approved adjudicators to the COE, AC / NCR for further necessary processing.
- f) The DOE of BPUT/ CoE AC / NCR, thereafter shall send the e-copy / hard copy of the abstracts of the thesis (Synopsis) and obtain the consent / willingness from the said adjudicators within 2 (Two) weeks to evaluate the thesis.
- g) On receipt of willingness / consent, the DOE / CoE AC shall arrange to send the thesis in e-mode to all the adjudicators within a week and the Supervisor / Co-supervisor, if any with a request to furnish the report within one month.

15.2 Receipt of Thesis Reports at the BPUT-AC

a) If the Report is not received from the Adjudicator(s) within one

- month, DoE / CoE AC may send a reminder once in a month after completion of the first month to the Adjudicator(s) concerned for early submission of the report in the prescribed format.
- b) If an adjudicator does not send the report even after two reminders or does not reply to the DOE, BPUT or CoE AC / NCR, the matter shall be placed before the Vice Chancellor who shall appoint another adjudicator either from the panel or outside the panel. Same procedure shall be followed by the PIC, BPUT / Principal of AC /NCR to obtain the consent from the new adjudicator and upon receipt of willingness shall send the e-thesis for evaluation.
- c) All the adjudicators are required to send their confidential reports (at least 250 words in length) independently to the DoE / CoE AC/ NCR along with the recommendation in the prescribed format.
- d) The Reports shall include:
 - A critical analysis of the work of the candidate as embodied in the thesis and an evaluation of the work in terms of its contribution to the advancement of knowledge.
 - ii. List of questions to be asked or points to be clarified if any, by the candidate at the final viva -voce by Viva-Voce Board.
 - iii. A definite recommendation as to whether the thesis attains the standard for the award of Ph.D. degree or not.
- e) The Adjudicators shall make any one of the following recommendations that the:
 - (i) Thesis is accepted in the present form and recommended for the award of Ph.D. degree. OR
 - (ii) Thesis needs minor clarifications indicated in the report which need to be clarified by the candidate at final Viva-Voce and it is recommended for the award of Ph.D. degree. OR
 - (iii) Thesis needs minor corrections to be made by the candidate as indicated in the report, which need to be incorporated in the thesis and clarified at the final Viva-Voce, and it is recommended for the award of Ph.D. degree. OR

- (iv) Thesis needs major corrections as indicated in the report and the revised thesis to be referred back to the adjudicator concerned for fresh evaluation. OR
- (v) Thesis is rejected for the reasons specified in the report and not recommended for award of Ph.D. Degree.

16. CONDUCT OF OPEN DEFENSE VIVA

- a) On receiving favorable recommendations for acceptance of the thesis from all the adjudicators, including the Research Supervisor(s), the DOE of BPUT / shall convey the same to the PIC (R&D), along with copies of the Reports received for conducting the final Viva-Voce of the candidate.
- b) Similarly, upon receipt of favourable reports from the adjudicators, the Principal of the AC /NCR shall initiate same actions for conducting the Viva-voce.
- c) The DOE shall obtain necessary approval of Vice-Chancellor as to who shall join as the External Adjudicator in the Final Open defence Viva for the Scholar. Thereafter, the PIC shall intimate the same to the Supervisor, DSC members, and the identified External Adjudicator. For Autonomous College NCR, the Principal will nominate the external examiner and intimate it CoE AC / NCR.
- d) The PIC, BPUT / CoE AC / NCR shall organise the Viva-voce at an identified venue, time and date with intimation to all concerned.
- e) This Viva-voce shall be open to all. The candidate shall make a brief presentation of the research work carried out highlighting the important findings/conclusions.
- f) The Scholar shall provide clarification(s) to all the queries of the adjudicators satisfactorily at the time of Viva-Voce.
- g) In case of adverse comments / rejection from the adjudicator, the PIC, BPUT shall send the report to the Supervisor to place it before the Doctorial Scrutiny Committee for necessary compliances and /or resubmission of thesis after compliances by the Scholar. Similar procedure shall be followed by the Principal of the AC / NCR to obtain compliances from the Scholar in such

cases of adverse comments / rejection.

16.1 Appointment of Additional Adjudicator, if necessary

- a) The Thesis shall not be accepted for award of the degree if any one of the Adjudicators (other than the Research Supervisor) finds that the research work is not up to the expected standard, as given in his/her report along with detailed reasons for the same.
- b) Vice-Chancellor may appoint a fourth adjudicator in case it is recommended by the DSC for the same. The DoE or the Principal of the AC / NCR shall take steps to obtain the willingness of the fourth adjudicator and upon receipt of consent shall send the ethesis to the adjudicator for evaluation.
- c) If the fourth Adjudicator, after evaluating the thesis gives a favourable Report, the DoE shall forward the same to the PIC for taking follow up necessary action to get the Viva-voce conducted by the DSC.
- d) If the fourth Adjudicator also does not approve the thesis, then the thesis shall be rejected.
- e) However, it shall be open for the candidate to seek Ph.D. enrollment at the University afresh.

16.2 Follow up action after Viva voce

- I. On successful completion of the Viva-Voce, the Board shall submit a confidential report in prescribed format to the PIC (R&D), BPUT/ Principal AC indicating clearly whether the performance of the candidate was satisfactory and if so, giving specific recommendation for the award of the Ph.D. degree to the candidate.
- II. In case, the performance of the candidate is not satisfactory, the Board shall report accordingly, giving reasons for the same and recommending another Viva-Voce to be conducted after three months. The PIC, BPUT / Principal of AC/ NCR as the case may be, shall arrange another Viva-Voce.
- III. After successful completion of the Viva-Voce, the Supervisor shall prepare and forward the Consolidated Report along with duly corrected versions of both the hard and the soft copies of

the thesis to the PIC (R&D) BPUT. For Autonomous College / NCR, the DSC shall forward the consolidated report to the PIC, BPUT through the Principal AC / NCR.

- IV. On receipt of intimation, evidences as to the payment of all fees, and all documents as to the conduct of Viva-voce from the Supervisor of BPUT / AC / NCR, the PIC R&D of BPUT shall place the same before the Vice-Chancellor for approval. On approval of Vice-Chancellor, the PIC shall forward the order of approval to the Director of Examinations, BPUT for issue of notification about the award the Ph.D. degree to the scholar.
- V. DOE, BPUT shall issue a befitting notification and provide the scholar a provisional certificate to this effect in the prescribed format.
- VI. The PIC R&D shall send the thesis and e-thesis to library for depository with INFLIBNET / Sodhganga.

16.3 Handling of Plagiarism Issues

- a) The Vice Chancellor shall have the powers to constitute Expert Committees to investigate into plagiarism issues connected with any Ph.D thesis submitted to the University, in the case of receipt of complaints either from the adjudicator(s), other individuals or any other sources (if required).
- b) In the event of a thesis being proved to be copied, plagiarized or misrepresented academically, the University shall have the powers to rescind the degree. Such a candidate shall not be eligible to register for any degree programme at the University in the future.

17.0 AWARD OF Ph.D. DEGREE

- a) The scholar shall be conferred the degree of Doctorate of Philosophy (Ph.D) in his branch of research at the convocation ceremony as per approved format of BPUT.
- b) The University shall hold the Copy Right of the entire thesis after conferring the Ph.D. degree.

18.0 DEPOSITORY WITH UGC AND THE UNIVERSITY

a) Following the announcement of the award of the Ph.D. degree,

the PIC of the University shall submit a final (corrected) soft copy of the Ph.D. thesis to the UGC within a period of thirty days for hosting the same on its Information and Library Network (abbreviated as INFLIBNET) / Sodhganga, accessible to all the Institutions / Universities.

b) The University shall also maintain a repository of such Ph.D. theses in its Central Library.

19.0 PROHIBITIONS

Prohibition of Candidates from Registering for any other Degree

No Ph.D. candidate of the University shall be permitted to pursue any other degree programme within the University or at other Universities / Institutions, concurrently with his/her on-going registration as a candidate for the Ph.D. degree. For the same, the candidate has to submit a declaration in the prescribed format.

20.0 DISPLAY OF LIST OF RESEARCH SCHOLAR ON WEBSITE

The BPUT shall maintain the list of all the Ph.D. registered students on its website on year wise basis – The list shall include the name of the Registered Scholar, Registration & Enrollment no, Topic of his/her Research, Name of Supervisor / Co-supervisor and name of AC / NCR.

21.0 FEE STRUCTURE

The candidate shall pay fees as prescribed by the University from time to time:

22.0 HONORARIUM, TA / DA TO EXPERTS OF DSC

- I. The Honorarium to each of the experts for attending the Doctoral Scrutiny Committee meeting is Rs 3000/- per sitting. The External Adjudicator attending the Final defence Viva shall be entitled to a payment of Rs. 5000/- per day with usual TA/DA as approved by BPUT from time to time.
- II. The concerned AC / NCR shall, however make payment to the DSC members and members of Viva-voce Board from their own fund.

23.0 REPEAL AND SAVINGS

a) Notwithstanding anything contained in these Regulations, the provisions of any guidelines, orders, rules or regulations in force at the University shall not be applicable to the extent of their

- inconsistency with these Regulations.
- b) The University shall issue such orders/instructions, and prescribe such format/procedure, as it may deem fit to implement the provisions of these Regulations.

24.0 INTERPRETATION

- a) Any question as to the interpretation of these Regulations shall be decided by the Vice-Chancellor of the Biju Patnaik University of Technology, whose decision shall be final.
- b) The University shall have the powers to issue clarifications to remove any doubt, difficulty or anomaly which may arise during the implementation of the provisions of these Regulations.

FEE STRUCTURE

The fees chargeable by the university, autonomous College(AC) and Nodal Centre for Research (NCR) for the Ph.D. programme shall be as follows:

SI.	Fee Head	BPUT (For direct candidates)	Candidates joining at AC	Candidates joining at NCR
1.	BPUT-ETR (To be collected by BPUT only)	Rs. 1000	Nil	Nil
2.	PhD enrollment application fee	Rs10,000/-	Rs10,000/- (*)	Rs10,000/- (*)
3.	Semester fee (Payment shall start from the date of communication of Final Registration to the scholars)	Rs10,000/-	As decided by AC	Rs10,000/- (*)
4.	Course work fees	Rs 10,000/-	As decided by AC	Rs10,000(*)
5.	One-time Registration fee (To be collected by BPUT only)	Rs.10,000/-	As decided by AC. But the AC shall deposit Rs10,000/-with the BPUT	Rs.10,000/-
6.	Thesis submission fee	Rs. 10,000/-	As decided by AC	Rs. 10,000/-

^(*) The AC / NCR shall deposit Rs3000/- with the University on this head and retain the rest. The above mentioned fees shall be subject to change by BPUT time to time.

Standard Operating Procedure in a nutshell

- 1. PIC invites applications from the prospective Supervisors / Co-supervisors and declares the list of eligible Supervisors in the BPUT website with the due approval of Vice Chancellor (on the 1st week of July every year). the list of Research Supervisors /Co-supervisors along with their research areas and number of scholars shall be published on the University website in the last week of September every year.
- 2. DoE, BPUT issues advertisement for the ETR in the month of **October / April** every year (for the admission in January/July depending on availability of vacancy in that particular year).
- 3. Candidates apply with payment of prescribed fees online
- Candidates appear written test at designated centers (3rd Sunday of November / May at notified Centers).
- 5. DoE, BPUT declares result of written test.
- 6. PIC R&D, BPUT conducts interview of the successful candidates (within two weeks of declaration of result of written test).
- 7. PIC R&D, declares final result combining the written marks with the interview marks (two weeks from the date of completion of Pre-enrollment Viva).
- 8. Candidate has the choice of Place either BPUT / AC / NCR to carry out his research work.
- 9. Candidate consults the BPUT approved Supervisor / Co-Supervisor and applies in prescribed format with the consent / signature of the concerned Supervisor.
- 10. The Supervisor prepares and submits proposal along with a list of six experts for formation of DSC for the candidate through PIC for approval of VC. If the Supervisor belongs to the NCR or AC, he / she shall apply to coordinator NCR/ PIC of AC.
- 11. Based on the recommendation of the Supervisor for formation of the DSC for the candidate, the coordinator NCR/ PIC of AC of the shall submit the proposals to the respective IDRDCs to consider the same and form the DSC. IDRDC considers the proposals and recommends for approval of principal NCR/AC.

- 12. The Supervisor convenes the DSC meeting to finalize the Coursework subjects and recommends for issue of provisional enrollment of the candidate at the BPUT / AC /NCR.
- The candidate deposits coursework fees at the BPUT Coursework center / AC / NCR and starts his coursework.
- 14. At the end of the coursework, the concerned college arranges for coursework examination for the candidate. The candidate may also go for Swayam / MOOCS / NPTEL for his coursework.
- 15. If the candidate successfully clears the examination, he shall now prepare the research proposal in consultation with his Supervisor for the DSC meeting. The DSC will be held to confirm the Research Topic and to recommend for registration of the candidate as a Research Scholar. The Scholar applies along with prescribed fees to the PIC of BPUT for issue of Registration letter in his favour.
- 16. The candidates who will pursue PhD through the AC / NCR shall have to route their applications with fees through the Principals concerned.
- 17. The PIC receives applications and writes to the Director Examinations to allot Registration Numbers to the candidates. On allotment of Registration Numbers, the candidates deposit Semester fees at the College concerned or the BPUT as the case may be and start their research work with the Supervisor. The Supervisor shall convene the DSC meeting to assess the progress periodically once in every six months.
- 18. The scholar completes his research work within the stipulated time. He gets ready for the pre-submission viva-voce after fulfilling all the criteria. The supervisor convenes the DSC meeting with the approval of the Principal of the college. The DSC if satisfied with the research work submits documents with the PIC, BPUT along with the list of 10 adjudicators in a sealed covered envelop. The PIC writes to the Director Examinations, BPUT for obtaining approval of the list and identification of two adjudicators by Vice-Chancellor. On approval, the Director Examinations, BPUT writes to the Principal concerned in sealed cover the names of the adjudicators. The Principal on receipt of the same takes action to get the thesis examined subject to the consent of the adjudicators.

- 19. On receipt of favorable report form the Adjudicators, the Principal shall proceed to convene open Final Defense Viva in presence of the DSC members and the faculty and students. Thereafter, the DSC members shall submit their final report along with all other documents such as the reports of the adjudicators etc. to the DoE / PIC R&D, BPUT through the Principal of the AC /coordinator NCR.
- 20. The DoE shall obtain approval of the Vice Chancellor and issue notification regarding award of the PhD degree in favor of the Scholar.





विश्वविद्यालय अनुदान आयोग University Grants Commission

(मानच सत्ताधन धिकाल मनाजव भागन सम्बद्धाः (Ministry of Human Resource Development, Govt. of India)

वहादुरशाह जफर मार्ग, नई दिल्ली-110002 Bahadur Shah Zafar Marg, New Delhi-110002

> Ph : 011-23236288/23239337 Fax : 011-2323 8858 E-mail : secy.ugc@nic.in

प्रो. रजनीश जैन सचिव Prof. Rajnish Jain

Secretary

D.O.No.F.1-1/2018(Journal/CARE)

December, 2019

Respected Sir/Madam,

University Grants Commission in its 543rd meeting held on 9th August, 2019 approved two Credit Courses for awareness about publication ethics and publication misconducts entitled "Research and Publication Ethics (RPE)" to be made compulsory for all Ph.D. students for pre-registration course work (attached as Annexure).

In view of the above, you are requested to ensure that the above two Credit courses may be made compulsory for all Ph.D. students for pre-registration course work undertaken in your University from the forthcoming academic session.

With regards,

Yours sincerely,

(Rajnish Jain)

TO THE VICE-CHANCELLORS OF ALL UNIVERSITIES

Course Title:

• Research and Publication Ethics (RPE)-Course for awareness about the publication ethics and publication misconducts.

Course Level:

• 2 Credit course (30 hrs.)

Eligibility:

• M.Phil., Ph.D. students and interested faculty members (It will be made available to post graduate students at later date)

Fees:

• As per University Rules

Faculty:

• Interdisciplinary Studies

Qualifications of faculty members of the course:

• Ph.D. in relevant subject areas having more than 10 years' of teaching experience

About the course

Course Code: CPE-RPE

Overview

This course has total 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc.) and plagiarism tools will be introduced in this course.

Pedagogy:

Class room teaching, guest lectures, group discussions, and practical sessions.

Evaluation

• Continuous assessment will be done through tutorials, assignments, quizzes, and group discussions. Weightage will be given for active participation. Final written examination will be conducted at the end of the course.

Course structure

• The course comprises of six modules listed in table below. Each module has 4-5 units.

Modules	Unit title	Teaching hours
Theory		35.55.55.55.55.55.55.55.55.55.55.55.55.5
RPE 01	Philosophy and Ethics	4
RPE 02	Scientific Conduct	4
RPE 03	Publication Ethics	7
Practice		
RPE 04	Open Access Publishing	4
RPE 05 Publication Misconduct		4
RPE 06	Databases and Research Metrics	7
	Total	30

Syllabus in detail

THEORY

- RPE 01: PHILOSOPHY AND ETHICS (3 hrs.)
 - 1. Introduction to philosophy: definition, nature and scope, concept, branches
 - 2. Ethics: definition, moral philosophy, nature of moral judgements and reactions
- RPE 02: SCIENTIFICCONDUCT (5hrs.)
 - 1. Ethics with respect to science and research
 - 2. Intellectual honesty and research integrity
 - 3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
 - 4. Redundant publications: duplicate and overlapping publications, salami slicing
 - 5. Selective reporting and misrepresentation of data
- RPE 03: PUBLICATION ETHICS (7 hrs.)
 - 1. Publication ethics: definition, introduction and importance
 - 2. Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
 - 3. Conflicts of interest
 - 4. Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
 - 5. Violation of publication ethics, authorship and contributorship
 - 6. Identification of publication misconduct, complaints and appeals
 - 7. Predatory publishers and journals

PRACTICE

• RPE 04: OPEN ACCESS PUBLISHING(4 hrs.)

- 1. Open access publications and initiatives
- 2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
- 3. Software tool to identify predatory publications developed by SPPU
- 4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

• RPE 05: PUBLICATION MISCONDUCT (4hrs.)

A. Group Discussions (2 hrs.)

- 1. Subject specific ethical issues, FFP, authorship
- 2. Conflicts of interest
- 3. Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hrs.)

Use of plagiarism software like Turnitin, Urkund and other open source software tools

• RPE 06: DATABASES AND RESEARCH METRICS (7hrs.)

A. Databases (4 hrs.)

- 1. Indexing databases
- 2. Citation databases: Web of Science, Scopus, etc.

B. Research Metrics (3 hrs.)

- 1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
- 2. Metrics: h-index, g index, i10 index, altmetrics

References

Bird, A. (2006). Philosophy of Science. Routledge.

MacIntyre, Alasdair (1967) A Short History of Ethics. London.

P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865

National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press.

Resnik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1–10. Retrieved from https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179–179. https://doi.org/10.1038/489179a

Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance(2019), ISBN:978-81-939482-1-7. http://www.insaindia.res.in/pdf/Ethics_Book.pdf

RESEARCH METHODOLOGY

Credit: 4

Class Hrs: 40

Module I: Introduction to RM:

Meaning and significance of research. Importance of scientific research in decision making. Types of research and research process. Identification of research problem and formulation of hypothesis. Research Designs.

Module II: Measurement and Data Collection.

Primary data, Secondary data, Design of questionnaire; Sampling fundamentals and sample designs. Measurement and Scaling Techniques, Data Processing.

Module III: Data Analysis – I:

Hypothesis testing; Z-test, t-test, F-test, Chi-square test. Analysis of variance. Non-parametric Test – Sign Test, Run test, Krushall – Wallis test

Module IV: Data Analysis – II:

Factor analysis, Multiple Regressions Analysis. Discriminant Analysis,

Use of SPS Package

IPR issues

Report Writing and Presentation: Research Report, Types and significance, Structure of research report, Ethical issues in research, Presentation of report.

Practical Aspect: Students are expected to use the trial version of relevant software package to learn the following:-

- (I) Draw frequencies, bar charts, histogram.
- (ii) Creating and editing graphs and charts.
- (iii) Bi-variate correlation.
- (iv) The t-test procedure.
- (v) Non-parametric Tests : Chi-square Test.
- (vi) One way ANOVA Procedure.
- (vii) Simple Regression, Multiple Regression, Reliability Analysis, Factor Analysis.

Reference Books

- 1. Research Methodology, Chawla and Sondhi, Vikas
- 2. Research Methodology, Paneersevam, PHI