



हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

नवाबगंज, कानपुर - 208002, उ.प्र., भारत

HARCOURT BUTLER TECHNICAL UNIVERSITY

NAWABGANJ, KANPUR - 208002, U.P., INDIA

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone : +91-0512-2534001-5, 2533812, website : <http://www.hbtu.ac.in>, Email : vc@hbtu.ac.in

100 YEARS
1921 - 2021

कार्यालय-कुलसचिव
हरकोर्ट बटलर प्राविधिक विश्वविद्यालय,
कानपुर-208002

संख्या: 1216/अदम/जी0ए0/विविध/2022

दिनांक: जुलाई 26, 2022

:: कार्यालय-ज्ञाप ::

मा0 कुलपति महोदय द्वारा दिये गये अनुमोदन के क्रम में विश्वविद्यालय में Research Ethics Committee (Animal, Chemical, Bio-Ethics etc.) का निम्नवत गठन किया जाता है :-

1. अधिष्ठाता, शैक्षिक क्रिया-कलाप
2. अधिष्ठाता, प्लानिंग एण्ड रिसोर्स जनरेशन
3. अधिष्ठाता, शोध एवं विकास
4. विभागाध्यक्ष, कम्प्यूटर साइंस एण्ड इंजी0 विभाग
5. विभागाध्यक्ष, इलेक्ट्रिकल इंजी0 विभाग
6. विभागाध्यक्ष, मानविकी विभाग

समिति से अनुरोध है कि उपरोक्तानुसार विश्वविद्यालय अन्तर्गत उच्च नैतिक मानक अनुसंधान को बढ़ावा देने के लिये नीति निर्धारण किये जाने हेतु आवश्यक कार्यवाही करने का कष्ट करें।

(प्रो0 नीरज कुमार सिंह)
कुलसचिव

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :-

1. विशेष कार्याधिकारी, कुलपति कार्यालय को मा0 कुलपति महोदय के संज्ञानार्थ।
2. समिति के सदस्य-गण, एच0बी0टी0यू0, कानपुर।
3. समस्त अधिष्ठाता/विभागाध्यक्ष/परीक्षा नियंत्रक/वित्त नियंत्रक, एच0बी0टी0यू0, कानपुर।
4. सिस्टम मैनेजर, एच0बी0टी0यू0, कानपुर।
5. कुलसचिव कार्यालय, एच0बी0टी0यू0, कानपुर।
6. गार्ड फाइल।

कुलसचिव

Translation of office order:

In accordance with approval granted by Hon'ble Vice –Chancellor, the constitution of Universities' Research Ethics Committee (Animal, Chemical, Bio-ethics etc.) is as under:

1. Dean, Academic affairs
2. Dean, Planning & Resource Generation
3. Dean, Research & Development
4. Head, Department of Computer Science and Engineering Department
5. Head, Department of Electrical Engineering
6. Head, Department of Humanities

The committee is requested to take action to formulate a policy for enhancement in high ethical standards for research in University.

(Prof. Neeraj Kumar Singh)
Registrar

L T P C
3 1 0 4

Ph.D. Course
RESEARCH METHODOLOGY
BMA 701/702 | 751/752

UNIT I: (08)

Defining research and research problems, classification of research; Scientific explanation and social science/ management research; Review of Literature. Research questions; Research framework; Hypotheses formulation, Research Variables

UNIT II: (08)

Research design formulations; Classification of research design – exploratory research design; descriptive research design, Causal & experimental research design. **Measurement and scaling**; Scales of measurements, Comparative and non-comparative scaling techniques; research framework; hypothesis formulation, sample research proposal preparation/case studies.

UNIT III: (08)

Tools of data collection; Questionnaire design- process and structure; Reliability and validity. Sampling design and procedure; Classification of sampling techniques, Sample size.

UNIT IV:

Overview of statistical techniques for data analysis- descriptive statistics, theoretical distributions, central limit theorem, testing of hypothesis, regression analysis, correlation analysis, inferencing, non-parametric statistics and tests, analysis of variance (ANOVA), experimental design, response surface methodology, uni-variate and multi-variate analysis of statistical data.

(08)

UNIT V :

Ethical issues in Research: Academic Integrity, Report writing and use of plagiarism check, citation ethics etc.
Use of Computer software for Data Analysis & Reporting: Report compilation, Overview of Softwares like MS Word, MS Excel, MS Power point, Latex, SPSS etc.

Reference books:

1. Research Methodology by C.R. Kothari, New age International, New Delhi. (Major contents of unit I- IV available)
2. Statistical Methods by S. P. Gupta, S. Chand & Sons.
3. Fundamentals of Statistics by D. N. Elhance, KITAB MAHAL ALLAHABAD.
4. Fundamentals of applied statistics by S.C. Gupta & V.K. Kapoor, S. Chand & Sons.
5. Research Methodology by R. Paneer shelvam, PHI publications.
6. Research Methodology: A step by step Guide for Beginners by Ranjit Kumar, Sage Publication (I) P. Ltd- New Delhi 4th edition.
7. Internet sources & Lecture notes.

R. Bal
Umu
R. Bal



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34842121	DKS	Active	02-Jun-2022	04-Dec-2022					

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Telephone: 0512-22534001-5

Fax: 0512- 2533812

HARCOURT BUTLER TECHNICAL UNIVERSITY
(Formerly Harcourt Butler Technological Institute)
(CENTRAL STORE & PURCHASE SECTION)
KANPUR-208002

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PURCHASE ORDER

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Dear Sir,

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		Total =	₹5,96,813 .52
		CGST-9%	₹53,713.22
		SGST-9%	₹53,713.22
		Total Rs.	₹7,04,240.00

Total Rs. (Seven Lakh Four Thousand Two Hundred Forty only)

1. Term and conditions are laid down overleaf.
6. Payment is subjected to the approval of Goods.
7. Above rates are (a) Ex-Godown F.O.R. HBTU, Kanpur.
(b) Free delivery, University premises
4. Delivery of the Items/Goods should be completed within 30 days. (Period)
5. Please insure to show taxes applicable separately on bill.

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2. Chief Store Keeper

3. Professor Incharge Central Library

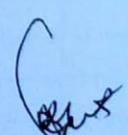
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Date.....


(Dr. A.K. Rathore)
Purchase Officer
Central Store & Purchase

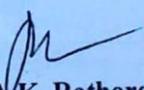
Vivek

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(Dr. C.L. Gehlot)
Incharge
Central Store & Purchase

Terms & Conditions

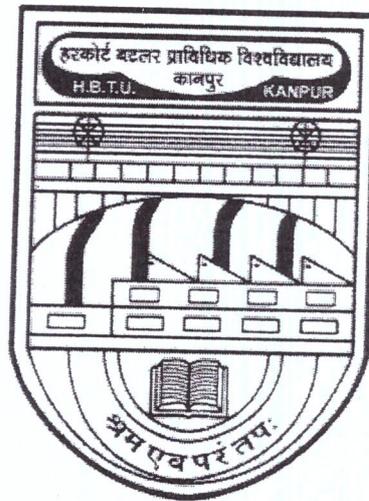
- Charge GST in Bill.
- The following GSTIN of HBTU should be mentioned in the *bill HBTU-GSTIN 09AAALH0730N1Z2.
- The supply should be according to the specification laid down in Purchase Order.
- All the consignment should be sent securely packed FREIGHT PAID and Insured to the Registrar, Harcourt Butler Technical University Kanpur.
- Demurrage wastage if any on account of the late receipt or R.R. will chargeable to you and the same will be deducted from your bill.
- INSTALLATION, WORKING & INSTRUCTIONS MUST ACCOMPANY WITH ALL MACHINES AND EQUIPMENTS.
- Bill signed in Blue Ink must be submitted in triplicate duly pre-receipted and stamped with revenue stamped affixed as per rules in original along with RR direct and NOT THROUGH BANK.
- Any goods rejected shall be returnable at your cost and risk.
- No payment shall be made for short supply, breakage and rejected goods.
- The payment will be made after complete supply of order.
- Goods will not be accepted unless accompanied by delivery challan/packing slip giving full particulars details of the orders number and date, description of items, quantity, make unit etc. in triplicate.
- 100% payment will only be made on acceptance of the goods as per our specification and satisfactory, inspection report of indenter /user.
- Our Bankers, Central Bank of India HBTU Extension Counter Nawab Ganj, Kanpur-208002.
- The delivery shall be strictly within 30 days from the date of this purchase order in case of delayed supply a penalty shall be imposed @ 2% per week up to 10% Maximum.
- Bill must be in the name of Finance Controller, HBTU, Kanpur.


(Dr. A.K. Rathore)
Purchase Officer
Central Store & Purchase


(Dr. C.L. Gahlot)
Incharge
Central Store & Purchase

**ORDINANCES
FOR
DOCTOR OF PHILOSOPHY PROGRAMMES**

(Effective from session 2019-20 for new entrants)



**HARCOURT BUTLER TECHNICAL UNIVERSITY
KANPUR-208002 (UP) – INDIA**

(Revised October, 2019)

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R. Baln
Rector

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R. Supte

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First Ordinances

In pursuance of the provision of Section 45 (1-3) of the Uttar Pradesh Harcourt Butler Technical University, Kanpur Act, 2016, these are the first Ordinances for Harcourt Butler Technical University, Kanpur:

1. INTRODUCTION

Short Title, Commencement and Definitions

- 1.1 These Ordinances shall be called the First Ordinances, 2017 of Harcourt Butler Technical University, Kanpur.
- 1.2 They shall come into force from session 2017-18 for new entrants.
- 1.3 Anything contained in Ordinances in violation to provisions of Act shall be void, and the provisions of Act shall prevail.
- 1.4 In these Ordinances, unless the context otherwise requires,
 - a) 'Act' means the Uttar Pradesh Harcourt Butler Technical University Act, 2016 as amended from time to time.
 - b) 'Section' means a section of the Act.
 - c) 'Clause' means a clause of the Ordinances.
 - d) 'University' means the Harcourt Butler Technical University, Kanpur.
- 1.5 Words and expression used herein but not defined in the Act shall have the same meaning as assigned to them in the Act.
- 1.6 The admission of students, eligibility to various courses of study, qualifications, attendance, registration, course structure, grading system, award of degrees, certificates, medals and other academic distinctions are covered in these Ordinances.
 - a) The 'University' may start other Degree, Diploma, Certificate programmes and other academic distinctions as deemed necessary for fulfilling its objectives. The Ordinances for the same shall be as prescribed by the Academic Council and the Executive Council.
 - b) The 'Courses of Study' shall be as prescribed by the Academic Council and approved by the Executive Council.
 - c) Fellowships and Awards shall be instituted as per the requirements with approval of the Vice Chancellor under intimation to the Academic Council and the Executive Council.
- 1.7 The University should maintain the list of all Ph.D. registered students on its website. The list should include name of the candidate, topic of research, department, supervisor and fellowship information as per UGC requirement.
- 1.8 The Ordinances shall follow the guidelines and regulations of UGC from time to time.

2. ADMISSIONS TO PhD PROGRAMMES

- 2.1 Various Departments of University offer Ph.D. Programme in different disciplines. The provisions of these regulations shall be applicable to all new programmes as and when introduced.

Department Offering PhD Programmes

a) School of Engineering

Department of Computer Science and Engineering
Department of Civil Engineering
Department of Electrical Engineering
Department of Electronics Engineering
Department of Mechanical Engineering

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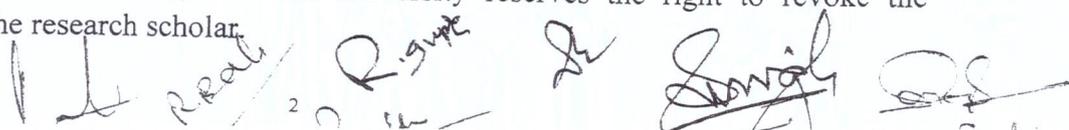
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- b) **School of Chemical Technology**
Department of Chemical Engineering
Department of Biochemical Engineering
Department of Food Technology
Department of Oil Technology
Department of Paint Technology
Department of Plastic Technology
Department of Leather Technology

- c) **School of Basic and Applied Science**
Department of Chemistry
Department of Physics
Department of Mathematics

- d) **School of Humanities and Social Science**
Department of Humanities

- 2.2 Admissions to Ph.D. programme shall be made through an Entrance Examination conducted by the University (as prescribed in clause no. 5.1 of UGC Regulations 2016). Entrance Examination comprises of Written Test (weightage: 70%), and a Interview (weightage: 30%). Candidates securing a minimum of 50% marks in written examination will qualify for Interview. Students who have qualified UGC-NET /JRF in their relevant disciplines with eligibility for Fellowship will be exempted from the Written Test. **Candidates qualified for the Ph.D. programme will have to deposit fee after submission of consent within a week from the Supervisor/Head of Department/Dean of School.**
- 2.2.1 The candidates qualifying Ph.D. Entrance Examination in any department of School of Basic and Applied Sciences fulfilling the eligibility criteria as mentioned in Table I will be eligible for admission to Ph.D. programmes of any department of School of Chemical Technology / Engineering. In such cases, the supervisor and place of work will be from the respective department of the School of Chemical Technology / Engineering and the degree awarded will be in the Applied Chemistry / Applied Physics / Applied Mathematics. The number of such seats shall be additional to the existing available seats of the School of Basic and Applied Sciences. **There will be a separate RDC for Applied Chemistry/ Applied Physics/ Applied Mathematics for such candidates.**
- 2.2.2 The University shall notify well in advance on its website and through advertisement in one national newspaper and one regional language newspaper **regarding** details of the number of seats for admission, procedure of admission, subject / discipline wise distribution of seats, category-wise reservation and all other relevant information for the benefit of the candidates. (Clause no. 5.2.2 of UGC Regulation 2016)
- 2.2.3 Admission shall be based on merit and as per specific criteria notified by the University keeping in view the guidelines / norms in this regards issued by UGC and other statutory bodies. will be applicable (Clause no. 5.3 of UGC Regulation 2016)
- 2.3 The reservation in Ph.D. admissions shall be governed as per U.P. State Government rules.
- 2.4 If, at any time after admission, it is found that a research scholar has not fulfilled any of the requirements stipulated in the eligibility criteria; or has used some fraudulent means to obtain admission, then the university reserves the right to revoke the admission of the research scholar.

Handwritten signatures and initials at the bottom of the page, including names like 'R. Gupta' and 'S. Singh'.

2.5 Admission of a candidate from any other University to Harcourt Butler Technical University on migration shall not be permitted.

2.6 Candidates who possess Master degree in Engineering/ Technology/ Basic Sciences/Computer Application / Computer Science /Management/ Humanities / Social Sciences or Equivalent or as prescribed by the University in the relevant discipline with requisite CGPA /percentage listed in Table 1 are eligible for the admission to Ph.D. programmes of the University.

Table 1: Eligibility Criteria for Admission to various PhD Programme

Sl. No.	Departments/Schools	Minimum Eligibility Criteria
1.	All Departments under School of Engineering	(i) M. Tech. / M. E. Degree in relevant discipline with a minimum of 60 % marks or equivalent CGPA/CPI OR (ii) Candidates having B. Tech. degree with minimum 70% marks with 2 years professional experience OR (iii) MCA degree with a minimum of 60 % marks or equivalent CGPA/CPI for MCA stream (Eligible for pursuing PhD in Computer Sciences &Engineering and Information Technology only)
2.	All Departments under School of Chemical Technology	(i) M. Tech. / M. E. degree in relevant discipline with a minimum of 60 % marks or equivalent CGPA / CPI. OR (ii) Candidates having B. Tech. degree with minimum 70% marks with 2 years professional experience OR (iii) Candidates with M. Sc. degree with minimum 60% marks in Chemistry/ Industrial Chemistry/ Applied Chemistry / Bio Technology or equivalent
3.	All Departments under School of Basic and Applied Sciences	M. Sc. degree in relevant discipline with a minimum of 60 % marks or equivalent CGPA / CPI
4.	All Departments under School of Humanities and Social Sciences	Master degree in relevant discipline / subject with a minimum of 60 % marks or equivalent CGPA / CPI

A relaxation of 5% marks in minimum qualifying marks is permissible (without grace marks) to candidates belonging to SC/ST category for admissions to Ph.D. programmes.

2.6 Essential qualification and procedure for applying requirements for the admission to Ph.D. degree programme under Quality Improvement Program (QIP) for in-service candidates will be as prescribed by rules in QIP scheme of MHRD, Govt. of India.

2.7 Regular faculty member of the University with a minimum of three years teaching experience shall be exempted from written test.

2.8 Category of Research Scholars

2.8.1 Full-Time Scholar

Research scholars of this category will have to work on Fulltime basis to pursue their Ph.D. They will be eligible to receive assistantship / scholarship from the University, or any other recognized funding agency as per the rules. Scholarships may be available for minority community as per State/Centre Government norms subject to the approval of competent authority. In case of non-availability of financial assistance to a candidate, one will have to meet the expenditure of **pursuing his/her** research work on self-finance basis. The grant of financial assistance from any source does not

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entitle the candidate from exemption of tuition fee and other prescribed fee to the university, unless such exemption is specifically granted in the assistance scheme and the fee as applicable are provided to the University by the agency extending financial support to the candidate.

2.8.2 Sponsored Scholar

Research scholars in this category are sponsored by recognized R&D organizations, academic institutions, government organizations, research laboratories or industries for pursuing Ph.D. programme in the University on Fulltime basis. Such students will be required to submit a Sponsorship Certificate from their respective organizations along with their GPF / CPF/EPF contribution proof. The University shall neither provide any assistantship/ scholarship to such research scholars nor exempt them from University fee and other expenses for pursuing research work. The due amount of University fee and other expenses shall be remitted by the sponsoring organization to the University. Research scholars under this scheme shall be treated as Full-time candidates. In-principle, the University should not sponsor University staff / faculty under this category.

2.8.3 Part-Time Scholar

The candidates working in research centers recognized by the University, regular/ contractual faculty members of this University /employees working in government/ government aided / private engineering colleges / universities / industries / public sector organizations shall be considered for the admission under this category subject to the terms and conditions prescribed by the University. Eligible faculty / staff members of the University shall be treated as Part-Time research scholars. **Regular faculty members/employees of the University have to deposit full fee. However the fee may be reimbursed either from TEQIP project or any other funding agencies/research projects as per norms.**

2.8.4 QIP Scholar

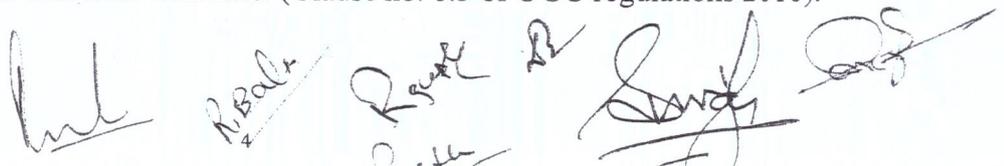
QIP scheme of MHRD provides opportunities to faculty members of the degree level engineering institutions to enhance their qualifications by admitting them to Ph.D. degree programmes. Research scholars under this scheme shall be treated as Full time candidates.

3. Ph.D. SUPERVISOR

3.1 Regular faculty members of the University holding Doctorate degree with two research publications in refereed journals are eligible for supervising research scholars. (Clause no. 6.1 of UGC Regulation 2016)

3.2 There can be maximum two supervisors as per UGC guidelines (Supervisor-I and Supervisor-II). Supervisor-1 must be from the department of HBTU, Kanpur which is the student's place of work. However, Supervisor-II may be from the same or from the other department of the University or from outside of the University in case of collaborative research with other University (National/International).

3.3 Professors may supervise a maximum of eight, Associate Professors six while Assistant Professors four PhD scholars. (Clause no. 6.5 of UGC regulations 2016).



- 3.4 **Status of Supervisor after Retirement, Leave, Resignation etc.**
- 3.4.1 A Supervisor who has guided a research scholar for a period of three years will be permitted to continue as Supervisor on retirement on his expressed consent.
- 3.4.2 In such cases, a regular faculty will be appointed as **Alternate** Supervisor by RDC with the approval of the Vice Chancellor for taking care of research and administrative responsibilities.
- 3.5 In case, a Supervisor goes on leave for more than one year duration or resigns, Ph.D. scholar will be allotted a new Supervisor by RDC with due approval from the Vice Chancellor.
- 3.6 In case, a Supervisor declines to supervise a research scholar, another Supervisor from HBTU, Kanpur who is actively engaged in the same area of research may be appointed by the RDC on the recommendation of the Head of Department and the Dean of the concerned School.
- 3.7 A research scholar admitted under Part-time category carrying out a part or full of his / her research work in parent industry / organization / national laboratories will have a Supervisor-II from his / her own organization. Only Ph.D. degree holder scientists / engineers having a minimum of five year experience in relevant area of research may be appointed as Supervisor-II in such cases.
- 3.8 **The Vice Chancellor may allow a change in the supervisor under unavoidable circumstances on the recommendation of Head of Department/Dean of Schools. In such cases** thesis submission will be allowed only after a lapse of six month time from the date of the change.

4. RESEARCH DEGREE COMMITTEE AND ITS FUNCTIONS

4.1 **Constitution of Research Degree Committee (RDC)**

The Research Degree Committee (RDC) shall be formed for each Department / subject as per the provisions of University / UGC norms (UGC Regulations 2016). The constitution of RDC shall be as follows:

1	The Vice Chancellor or his nominee	Chairman
2	Dean of Research and Development or Associate Dean R&D	Member-Secy.
3	Dean of the concerned School	Member
4	Two subject experts having Doctoral degree or equivalent in cadre in the related area, preferably, Professor/Associate Professor from outside universities to be nominated by the Vice Chancellor	Member
5	Head of the concerned Department	Member
6	Supervisor of the concerned student	Member

In case Head of Department is a non-Ph.D., a Professor / Associate Professor from the Department / School with a Ph.D. degree may be nominated to RDC by Dean of concerned School duly approved by the Vice Chancellor.

- 4.1.1 The tenure of the RDC shall be of two years or as per the University / UGC guidelines.

5. Ph.D COURSE WORK

- 5.1 **Research Scholar with M.Tech. Degree should pass 04 (four) courses (including the compulsory course) of a minimum of 12 credits. A research scholar with B Tech/M.Sc. degree is required to pass 06 (six) courses (including the compulsory course) of a minimum of 20 credits. (As per clause no.7 of UGC Regulations, 2016).**
- 5.2 **Research Methodology** is a compulsory course with 4 credits for all the research scholars. Other courses should be advance courses related to research methods, computer application and review of published researches in relevant field, training, field work, etc. meant to prepare the students for Ph.D. Degree.
- 5.3 Students should complete the course work as follows:

Details of Course work requirement

Sl. No.	Research Scholar	Minimum courses required	Compulsory course
1	Research scholars with M.Tech. Degree in respective discipline / subject	4 courses of a minimum of 12 credits	Research Methodology
2	Research scholars with B.Tech./M.Sc. Degree	6 courses of a minimum of 20 credits	Research Methodology

- 5.4 Candidates already holding M. Phil. degree and admitted to Ph.D. programme may be exempted by RDC from the PhD course work (Clause no. 7.6 of UGC Regulation 2016)
- 5.5 As per the provisions in Clause 7.7 of UGC Regulation 2016, a certificate of completion of all Ph.D. courses shall be issued to the research scholar by Dean, R&D after due approval / confirmation by RDC. This will be a pre-requisite of PhD thesis submission.
- 5.6 A Ph.D. scholar has to obtain a minimum 'P' Grade or above (Grade point 6 or above) in each subject as applicable for M.Tech. programme in order to be eligible to submit the thesis.
- 5.7 The duration of PhD, course work shall be two semesters as per UGC regulations 2016. However, the students may be allowed to complete the courses in four semesters if requested.
- 5.8 The Ph.D. scholars may be allowed to do PhD course work in their respective departments and / or own university and / or Central Technical Institutions (IITs, IIMs, NITs, IIITs etc.) and / or Central /State Universities and / or State Govt. Technical Institutions and / or online such as NPTEL, MOOCs, SWAYAM and / or any other research organizations as approved by RDC.
- 5.9 **Prescribed courses, attendance norms, evaluation scheme, rules for unfair means, challenge evaluation etc. shall be as per the University norms applicable to Post graduate programmes of the University.**
- 5.10 No change in approved courses shall be allowed without the approval of the RDC.



6 PROGRAMME DURATION

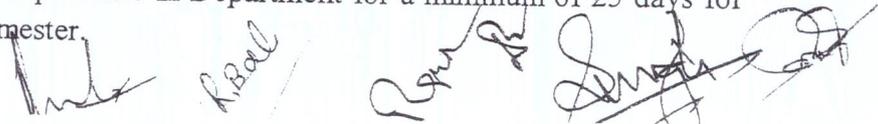
- 6.1 The Full-time PhD programme shall be of a minimum of three years duration and a maximum of six years.
- 6.2 Part-time / Sponsored PhD programme shall be of a minimum duration of four years and maximum of six years.
- 6.3 The extension of programme duration beyond the stipulated time mentioned in 6.1 and 6.2 may be a maximum of one year after the due approval from RDC. **The research scholar will have to pay full annual fee in case of extension due to pending course/lab work otherwise if a candidate has completed his/her all requirements for research work and only writing work is in progress then no fee will be charged.**
- 6.4 Women Ph.D. scholars and the scholars with disability (PH/PwD) may be allowed additional relaxation of two years for Ph.D. (Clause no. 4.4 of UGC Regulation 2016)

7 REGISTRATION AND ENROLMENT

- 7.1 PhD scholars are required to register at the beginning of each Semester as per academic calendar of the University.
- 7.2 Registration should be carried out by the student himself / herself on stipulated dates. A student is allowed registration for 10 working days including the date of registration with a fine of Rs.100 per day. Student will not be allowed registration after stipulated date. Such students shall have to register at the start of next academic session.
- 7.3 Students having outstanding dues to the University or hostel shall be permitted to register only after clearing the dues.
- 7.4 In-absentia registration may be allowed only in rare cases by the Vice Chancellor in case of serious illness/ natural calamities / unavoidable circumstances upon the recommendation of Dean of Academic Affairs.
- 7.5 All the students admitted and registered in the University are required to submit the Enrolment Form within one month of registration. Non-compliance will lead to cancellation of admission.
- 7.6 No scholar is allowed to concurrently registers for any other Postgraduate/ Research degree at some other University/College/Organization. Admission will be terminated in all such cases.

8 ATTENDANCE

- 8.1 All Ph.D. scholars registered under Full-time as well as Part-time programmes including Sponsored candidates are required to be present for research work with Supervisor in the concerned Department for a period of 200 working days.
- 8.2 All Full-time Ph.D. scholars with **or without** fellowship / scholarship are required to sign in attendance register in the Department on each working day.
- 8.3 All Full-time Ph.D. scholars **with or** without scholarship / fellowship are required to frequently contact the Supervisor in relation to research work.
- 8.4 **All full time Ph.D. scholars with scholarship/fellowship are required to take 8-10 hours/week for theory/practical classes as assigned by Head of Department**
- 8.5 All Part-time Ph.D. scholars are required to produce a certificate before RDC from the Supervisor (s) indicating their presence in Department for a minimum of 25 days for research work during the Semester.



- 8.6 There is no summer or winter vacation for the research scholars.
8.7 Leave rules for Full time Ph.D, scholars with or without fellowship / scholarship shall be as per the University/UGC rules.

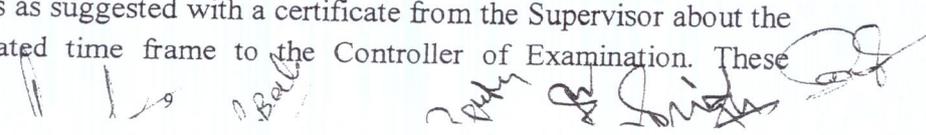
9 RESEARCH PROGRESS ASSESSMENT

- 9.1 After registration, every research scholar is required to start the research / literature survey along with Ph.D. course-work and preparing Ph.D. synopsis. First RDC shall approve the course-work, supervisor(s) and broad research area of the scholar.
9.2 Research scholar is required to present the detailed synopsis in the second RDC meeting. Every research scholar is required to present research progress before the RDC for evaluation.
9.3 If the performance of the scholar is found to be unsatisfactory by the RDC for three consecutive times, his / her admission may be terminated.
9.4 In case of any dispute, the decision of RDC shall be final and binding to all.
9.5 Every registered Ph.D. scholar including Part-time scholar is required to present his / her monthly research progress in the Department before a Committee consisting of all faculty members of the Department. Monthly assessment report of each scholar shall be maintained by the Supervisor and the Head of the Department.
9.6 **For the assessment of research progress of Ph.D. scholars the remarks of RDC, progress reports etc., a meeting of RDC shall be centrally convened by the Dean Research and Development.**

10. THESIS SUBMISSION & EVALUATION

- 10.1 Research scholars will have pre-submission presentation of Ph.D. thesis before the RDC after fulfilling the following conditions:
- a) Certificate of completion of Ph.D. course works.
 - b) Candidates should have at least one publication in refereed journals in SCI/SCOPUS/UGC/INDEXED or other peer-reviewed journals as prescribed by UGC/AICTE and two research papers in Conferences. (Clause No. 9.4 of UGC regulations, 2016)
 - c) A Certificate of Plagiarism–Testing as issued by Department Academic Integrity Panel (DAIP). The maximum limit for plagiarism for the acceptance of Ph.D thesis is as prescribed by UGC. The Dean R&D will issue notification time-to-time in this regard.
- 10.2 Ph.D. thesis submitted by research scholar shall be evaluated by at least two External Examiners who are not in the employment of the University, out of which one of the External Examiner is from abroad. The Viva-voce will be conducted on receipt of favorable Thesis Evaluation Report from the Examiner. The Viva-voce will be conducted by a Board consisting of one of the External Examiners, Supervisor of the student, Head of the Department and One member of RDC nominated by the Vice Chancellor. The Thesis Defense by the research scholar shall be open to all faculty members and research scholars of the Department. (Clause no. 9.7 of UGC regulations 2016)
- 10.3 For the appointment of External Examiners for evaluation of Ph.D. thesis, the Supervisor will recommend a panel of 06 Examiners (03 from Central Technical Institutions, Central Universities, Institute of National Importance, State Technical Institutions, State Universities, Approved Govt. Research Organizations and 03 from Foreign Universities and Foreign Research Organizations). The same be submitted to the Vice Chancellor for approval and appointment of Examiners by the Controller of Examination.

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- 10.4 The research scholar shall submit his/ her thesis within six months from the grant of approval of thesis submission by the RDC. Three Spiral bound copies along with thesis summary are required to be submitted with a soft copy (PDF format). All copies of the thesis duly signed by the supervisor(s). The thesis copy need to be forwarded by concerned Head of the Department and Dean of School are to be sent to the Controller of Examination with intimation to Dean R&D. RDC may grant additional time for the thesis submission beyond three months (but not more than six months) on the request of the research scholar.
- 10.5 The PhD thesis shall strictly be on the format prescribed by the University and must contain the Copyright as “©Harcourt Butler Technical University, Kanpur-208002, (U.P.) INDIA, All rights reserved”
- 10.6 On the receipt of requisite copies and summary of the thesis, the Controller of Examination will send a formal offer letter and E-mail to the External Examiner in order of preference from the panel as approved by the Vice-Chancellor for acceptance to act as Examiner. After receiving the consents, thesis will be sent to two Examiners along with relevant documents, either in form of hard copy (through registered/speed post) or a soft copy (through e-mail) or via both modes as per the consent given by the Examiner. A complete record of E-mails, postal correspondences, phone numbers etc. shall be maintained by the Office of Controller of Examination. In case of refusal, the next External Examiner in the order of preference will be approached. All correspondences/ notifications in regard to thesis evaluation and viva-voce examination of the scholar (except where stated otherwise) shall be done by the Controller of Examinations. All correspondence shall be confidential, except the correspondence with the research scholar and general circulars/ notifications.
- 10.7 In order to avoid any delay in the thesis evaluation process, electronic mode e.g. e-mail route shall be used for obtaining consent of the Examiner and sending a soft copy the thesis (in PDF format). Thesis Evaluation report received in soft scanned copy with signature and seal may be accepted if hard copy is not received.
- 10.8 Non-receipt of the thesis report from anyone of the two Examiners in a period of three months from the date of dispatch, two reminders will be dispatched (immediately with a gap of one month).If no response is received, thesis will be sent to the next Examiner listed in the panel. Before correspondence with another External Examiner, the original External Examiner must be informed by the Controller of Examination about the cancellation of his / her appointment as Examiner.
- 10.9 Copy of reports of both the Examiners shall be presented by the Controller of Examination to Dean R&D for records and further processing, if any. There may be four possible situations arising out of the nature of the reports The steps to be taken appropriate to the circumstances are laid down as under :
- 10.9.1 The Examiners are unanimous in recommending the Final Defense / Viva-voce Examination without any modification in the thesis, Viva-voce in such cases shall be scheduled and duly notified by Controller of Examination in consultation with External Examiner and the Supervisor.
- 10.9.2 The External Examiners are unanimous in recommending Final Defense / Viva-voce Examination, but one of the Examiners has suggested minor modifications and / or asked for clarifications. The candidate in that case shall make modifications and provide the clarifications as suggested with a certificate from the Supervisor about the compliance in a stipulated time frame to the Controller of Examination. These
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modifications / clarifications may be sent to the Examiner, if so asked. After the compliance is ascertained, the Viva-voce Examination shall be scheduled and duly notified for Final Defense by the Controller of Examination in consultation with External Examiner and the Supervisor.

- 10.9.3** One of the External Examiners rejects the thesis, while other External Examiner gives a favorable report. The matter shall be referred to RDC which may either ask the candidate to modify the thesis as suggested within a given time frame not exceeding a period of six months and send the modified thesis to the Examiner or may recommend to the Vice Chancellor to appoint another External Examiner for thesis evaluation.
- 10.9.4** Both the External Examiners reject the Thesis. Such cases will be reviewed by the Research Degree Committee (RDC) which may permit submission of a revised thesis on additional payment of the prescribed fee (which will be equal to the fees deposited earlier as thesis submission fee). Research Degree Committee may fix a time frame which shall not be less than one year from the date of grant of such permission. If RDC does not recommend for reconsideration, the candidate will be declared 'failed' and his/her registration shall be cancelled. The observations and comments of the Examiners, if any, shall be provided to the Supervisor. No resubmission of the thesis without modification on the lines of criticism made by the earlier Examiner be allowed. The revised thesis shall be referred for evaluation as per prescribed procedure. New Examiner will be provided with copies of earlier Thesis, Thesis Evaluation Reports and details of changes made in addition to the revised thesis. Examiners need to respond specifically to the observations of the earlier Examiner and the changes made by the student before re-submission. Second time rejection will lead to termination of admission.
- 10.9.5** Once the reports of the Examiner have been accepted as 'satisfactory', the candidate will be allowed Viva-voce Examination. One of the Examiners of the thesis will be invited as an External Examiner for PhD Thesis Defense. The Viva-voce Examination will be open to all the faculty members of the concerned Department. The evaluation, however, will be done by the Viva-voce Board comprising of External Examiner, one member of the RDC to be nominated by the Vice Chancellor along with the Supervisor(s) and Head of the concerned Department. The Evaluation Report is to be submitted by the Viva-voce Board to the Controller of Examination. Its outcome could be as given below:

Outcomes of Final Viva-voce Examination

Sl. No.	Evaluation report of Viva-voce Examination	Remark
1	Satisfactory	Recommendation for AWARD of Ph.D. degree by the competent authority. Provisional Degree Certificate (PDC) is issued by the Controller of Examination (CoE) after acceptance and approval of the Evaluation Report of Viva-voce Board by the Vice-Chancellor. The date of university notification shall be the date of award of PhD degree. PhD Degree shall be awarded in the convocation.
2	Unsatisfactory	Re-appear for Thesis Defense after a lapse of three months as scheduled and notified by Controller of Examination after due recommendation.

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10.9.6 On successful completion of the Thesis Viva-voce Examination, the student is required to submit three copies of the final revised thesis in hard bound form and a soft copy of thesis after incorporating suggestions of Viva-Voce Board, if any which will be archived in University Library and National Repository as per the prescribed format. One copy of thesis should be kept in Office of Controller of Examination for records.

11. OTHER IMPORTANT ISSUES

11.1 Change of registration from Full-time to Part-time Ph.D. programme

11.1.1 A student admitted to a Full-time Ph.D. programme may be permitted to change to a Part time programme. A student requesting for such a conversion must have completed the coursework successfully appeared in at least four RDC meeting with satisfactory performance and have completed a minimum of 03 years of duration as full time regular candidate. Such request may be forwarded by the Supervisor(s) and the HoD, with recommendations of Dean of School and Dean R&D for approval from Vice Chancellor. Student is also required to produce No Objection Certificate from the Head of the institution/organization which he/she proposes to join, in case he/she is changing his/her workplace from remaining period for completion of research work.

11.1.2 Such conversion approved by the RDC will have following conditions:

- (a) The student must complete his/her thesis within a deadline governed by Clause 6.3 counted from the date of his/her first registration in the programme.
- (b) Provision of conversion from Full-time to Part-time status can be availed only once during the programme.

11.2 Termination from Ph. D. programme

Registration of a research scholar shall be cancelled in any one of the following eventualities after due approval from the Vice Chancellor:

- (a) If a student absents for a continuous period of three months without prior intimation/ proper sanction of leave.
- (b) If a student requests for cancellation of registration from the PhD programme and the request is duly recommended by the Supervisor/Head of the Department.
- (c) If academic and research progress of the student is not satisfactory and the RDC recommends for cancellation.
- (d) If all the prescribed courses by RDC are not successfully completed by student in stipulated time.
- (e) If student is found involved in an act of misconduct and/or indiscipline and his / her termination has been recommended by the competent authority.

11.3 GENERAL ELIGIBILITY FOR THE AWARD OF Ph.D. DEGREE

A research scholar shall be declared eligible for award of the PhD degree if:

He/she has:

- (a) Registered and successfully completed all the assigned Ph.D. courses, thesis and other requirements of the programme as prescribed in the Ordinance;
- (b) No dues to the University, hostels, libraries etc.
- (c) No disciplinary action is pending against him/her.

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11.4 UGC REGULATIONS:

UGC regulations will prevail in case of any ambiguity or dispute.

11.5 STUDENT DISCIPLINE

All the students who seek admission shall have to abide by the discipline norms of the University and follow conduct or discipline rules/Anti-ragging measures in the University. In case of any act of indiscipline demonstrated by any of the student, he / she shall be liable for punishment. On the recommendation of Proctorial Board, the punishment may be in terms of suspension for the semester, expulsion from the hostel, barring from the placement facility and/or termination from the University. The decision of the Vice Chancellor shall be final and binding.

11.6 POWER TO MODIFY

Notwithstanding all that has been stated above, the Academic Council has the right to modify partly or completely the provisions of above Ordinances with the approval of the Executive Council. Under extreme exceptional circumstances arising out of certain inconsistency in the ordinances or otherwise, The Vice Chancellor can take suitable decision in deference to the laid down provisions, provided standard of evaluation is not compromised and, the same shall be reported to the Academic Council and Executive Council with suitable justification. Such actions of the Vice Chancellor shall not be treated as precedence under any circumstances.

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