RESEARCH REGULATIONS FOR Ph.D. PROGRAMMES OF JNTUA FOR THE ACADEMIC YEAR 2018-19

Research programmes leading to award of Ph.D. degrees (Full time and Part time/Externally registered) are offered in the teaching departments/centres of the University colleges, its affiliated colleges and research organizations recognized by this University as research centres.

These regulations will come into force from the 2018-19 research admissions, onwards

1. Departmental Research Committee (DRC)

1.1 Formation of DRC

Every academic department must have a Departmental Research Committee (DRC). The term of the Departmental Research Committee is for a period of three years or is coterminous with Chairperson, Board of Studies whichever is earlier.

The composition of the Committee is as follows: Head of the Department, Chairman, Board of Studies and minimum one (maximum three) senior most faculty who have expertise in the research specialization/area of the research scholar. It is preferred for each specialization minimum one expert shall be included in the committee, in case of availability.

The Head of the Department is the Convener of the Committee. The Chairman, Board of Studies is the Chairman of the Committee. All members must have doctoral degrees.

In the case of certain disciplines, where there is no specific department, the Vice-Chancellor will finalize the committee members as per the requirements, considering the relevant department Head of the Department as convener.

1.2 Functions of DRC

The functions of the Departmental Research Committee are:

- 1. To assist the Director, Research and Development (R&D) of the University in the admission process,
- 2. To assist the Director R&D of the University in approving the Academic Calendar for Ph.D. programmes for the academic year.
- 3. To assist the Director R&D of the University in deciding areas or topics of research to be pursued by the M.Phil./M.S./Ph.D. students for that academic year at the time of admission.

- 4. To assist the Director of Academic and Planning in recommending syllabi for Pre-Ph.D. course work for approval by BoS.
- 5. To suggest panel of examiners and paper setters for Pre-Ph.D. examinations to the BoS in turn, which will be submitted to the Director R&D.
- 6. To prepare Database of experts for each specialized areas which can be used for the preparation of panel of examiners for adjudicating the Ph.D. dissertations/thesis. The database may be periodically updated and made available to the Director R&D.
- 7. To evaluate the progress in the research work of the scholars, twice in a year in Research Review Meetings and whenever is required
- 8. To participate in all the Viva-Voce examinations to encourage the scholar while the examination is conducted by external and internal examiners
- 9. To encourage and suggest the modifications in Pre submission seminars/Pre talks of the scholars in Ph.D. programmes.
- 10. Any other functions referred to by the Director R&D or the Vice-Chancellor. The DRC shall also follow the guidelines prescribed by the University from time to time.
- 11. All special cases which do not fall under the above categories shall be discussed at the Academic Senate for final recommendations.
- 12. Vice-Chancellor is final authority to change the DRC members, if necessary. Also, Vice-Chancellor is final authority to assign some or total functions of DRC to other committee or R & D directorate.

2. Eligibility criteria to be a Research Supervisor and Co-Supervisor

a) Any regular/ratified Professor/Associate Professor (with Ph. D qualification) of this University with at least five research publications in refereed journals having Science Citation Index(SCI)/SCI-Expanded or journals having impact factor given by Thomson Reuters or UGC listed journals.

&

Any regular / ratified Assistant Professor of this university with a Ph.D. degree and at least two research publications in refereed journals having

Science Citation Index (SCI)/SCI-Expanded or journals having impact factor given by Thomson Reuters or UGC listed journals is eligible.

Further, Supervisor shall have a minimum service of 7 years *out of which* 2 years should be post Ph.D. In case of faculty from affiliated colleges their service should have been ratified by JNTUA.

University adapted UGC norms regarding number of research scholars allowed to guide by the faculty members at any instance of time. That is, Professor is allowed to guide eight Ph.D. scholars, Associate Professor is allowed to guide six Ph.D. scholars and Assistant Professor is allowed to guide four Ph.D. scholars at any given point of time.

- b) Only a full time regular/ratified teacher of the concerned University shall act as a supervisor/co-supervisor. The external supervisors are not allowed. However, Co-Supervisor can be allowed in inter-disciplinary areas from other departments of the same institute or from other related institutions of higher learning institutions/Government R&D organizations, with the approval of the University.
- c) Any scientist working as a regular/ratified employee in an Institute/ Research Centre recognized by University as a Research Centre satisfying the eligibility criteria mentioned in (a), to be considered as research guide in given Department
- d) The Director R&D shall process the applications received from various faculty members from different departments for recognition as research guide and give necessary orders for recognition based on the approval of Vice-Chancellor.
- e) Faculty on lien/deputation shall include an eligible teacher from their departments as co-guide for every research scholar working under their guidance. Further, in case the teacher extends his lien period beyond one year, the co-guide shall be nominated as the Principal guide and in case the teacher on-lien wishes to continue to guide the candidate he can do so as co-guide for a maximum of two years from the date of sanction of initial lien. In case of no co-guide at the time of admission, the supervisor has to finalize the co-supervisor with the consent of the scholar, before he avails the lien, and also with the approval of University.
- A retired faculty may act as Research Guide for full-time scholars, if he/she is appointed as Emeritus Professor and or if he/she has a Major Research Project with Junior Research Fellowship/Senior Research Fellowship. The faculty having Emeritus position or a Research Project beyond their retirement can act as guides for two years.

- g) Any retired teacher will continue to guide already registered scholars with him/her, for two more years after the retirement, and should include a coguide for each of his/her research scholar soon after his/her retirement.
- h) Faculty who resigned/retired voluntarily from service shall include an eligible faculty from their departments as co-guide for every research student working under their guidance. However, their guideship will be terminated in two years from the date of resignation/voluntary retirement, while the co-guide will become the Principal Guide.

3. Research Centres

3.1 Research Laboratories as Research Centres

- Research laboratories of Government of India/State Government located in the State/R&D Centres of Public Sector Undertakings/Private R&D Centres of Industries with at least two eligible Research Supervisors in the Department concerned along with required infrastructure, supporting administrative and research promotion facilities as per UGC Regulations shall be considered eligible to be recognized as Research Centres.
- In case of Private R&D Centres of Industries a turnover of not less than Rs.100 crores shall be considered.

3.2 Affiliated Colleges as Research Centres

Colleges may be considered to supervise the scholars of Ph.D. full time programmes only if they satisfy the availability of eligible Research Supervisors, required infrastructure and supporting administrative and research promotion facilities as mentioned below

- a) In case of science and technology disciplines, exclusive research laboratories with sophisticated equipment as specified by the University concerned with provision for adequate space per research scholar along with computer facilities and essential licenced software, and uninterrupted power and internet facility
- b) Earmarked library resources including latest books, Indian and International journals, e-journals, extended working hours for all disciplines, adequate space for research scholars in the Department/library for reading, writing and storing study and research materials. Back volumes for at least 3 years in soft copy or hard volumes must be available.

- c) The P.G. Course in Engineering/Pharmacy (with the exception of Mathematics/Physics/Chemistry/Humanities Departments) must be in existence for at least five years and these departments should have NBA accreditation and for other disciplines like Science/Arts, Commerce and MBA etc., NAAC accreditation (for the institute) is required. Name of the Branch/Department in which Ph.D. programme is to be offered must be declared with specialization.
- d) At least two ratified eligible faculty members should be available for recognition as research guides in each specialization.
- e) Failure to ensure the recognized research guide's stay in the college for a period of five years from the date of admission of the candidates into research, the college has to pay a minimum penal fee of Rs.1,00,000/- (one lakh) for each scholar admitted.
- f) If the teacher is retired/left from the Institution, the research student may be transferred to any other eligible guide or to any other research centre recognized by University.
- g) In case of admission in affiliated colleges recognized as research centres of University, there shall be no requirement of a co-guide from the concerned academic department of the constituent/affiliated college of the University.
- h) Necessary amount per course as prescribed by the university from time to time should be invested for procurement of latest journals and books and Laboratory facilities for the courses. Also, the institute/organization shall be willing to provide the expenditure for contingencies/ conferences /field works/stationary etc.
- i) A full time research scholar has to reside at the place where the University College/Unit or research centre in which he/she has registered for research program
- j) Candidates who are employed in any institution/Organization are not eligible to apply for full time programs. All other criteria such as qualifications, course work etc., are same for both full time and External candidates.
- k) The affiliated Institute/Organization shall be willing to offer to the scholar a minimum **fellowship** of the amount as per AICTE/UGC norms upto minimum period, for full time scholar. JRF/SRF Candidates with

any other fellowships shall be admitted in University only against the notification.

- 1) The Institute/Organization must give assurance by way of an affidavit regarding availability of allotted Supervisor for the Research programme period continuously till the thesis submission.
- m) The research scholar admitted, should not be given any teaching work load related to theory courses. He/she should devote full time for carrying out research activities only. However, work load related to laboratories or Library may be assigned as per AICTE/UGC norms.

3.3 Process of recognizing research centres

The process of awarding recognition will be initiated on receipt of application from the Institute in a prescribed proforma.

Based on the report submitted by the committee, the research centre is recognized by the University.

These institutions will be required to bear the cost of inspection. Institutions thus recognized as research centres shall pay a recognition fee as prescribed by the University from time-to-time.

3.3.1 Procedure for Recognition of New Departments/Institutions Offering Engineering/ Pharmacy/Management Programmes as Research Centres:

a. Department/Institutions seeking approval/recognition to research programme shall apply to the University in the prescribed format.

b. They shall submit the duly filled in form along with supporting documentary evidences showing the possession of required facilities for the conduct of Ph.D. programme.

c. The Engineering/Pharmacy/Management Colleges seeking the recognition of the Department shall have the following facilities according to the needs of the research:-

i) Adequate laboratory facilities for Experimental Work needed for research

ii) Adequate library facilities for advanced research work

d. An inspection fee of Rs. 50,000/- (Rupees Fifty thousand only) or that may be prescribed by the University from time to time has to be paid at the time of submission of the application form when seeking recognition.

e. After due scrutiny of the filled in applications and documents received thereof, an inspection committee consisting of five members, having the Rector as a Chairman, Director R&D as a Convenor and PG Board of Studies chairperson and two experts in the field of specialization shall be

constituted to inspect all the infrastructural facilities available in the Department. The recommendations of the Inspection Committee, if found satisfied, shall be placed for approval by the University.

f. In case, if the University is not satisfied of research/Teaching facilities, it may reject the application and the Institution will be informed about the deficiencies.

The Institution can request for re-inspection after duly rectifying the deficiencies pointed out in the first inspection. The University shall depute another inspection team for re-inspection after obtaining the re-inspection fee of **Rs. 50,000/-** (Rupees Fifty thousand only) or as that may be prescribed by the University from time to time.

The orders recognizing the said Department shall be issued after collecting the recognition fee of Rs. 20,000/- (Rupees Twenty thousand only) per annum per faculty or as that may be prescribed by the University from time to time.

- g. The Department offering for doing Ph.D shall be inspected once in 3 years and the renewal of recognition shall be obtained by the Department concerned duly remitting the required inspection and recognition Fee.
- h. Full time/External scholars admitted at research centres shall pay tuition fee and other required fee to the University for entire duration of the programme and will not be reimbursed to the research centres.

3.3.2 Accountability and Responsibility of Research Centres:

Such recognized Institution shall be accountable to the University in the following manner:-

- 1. Shall submit annual reports of the Progress and Research work being done in the Institute.
- 2. Progress Report of the Research student being done shall be submitted periodically or as and when called for by the University
- 3. Number of Research students registered after the grant of Recognition shall be informed.
- 4. Keep the University informed about its efforts in seeking Grants/Funding from National and International Agencies based on the Research Status provided by the University.
- 5. All the research scholars admitted in the institute should attend the Research Review Meetings conducted by the University.

3.3.3 Information to be obtained from the Institutes interested in applying for Recognition as Research Centres:

- 1. Name of the Department/Branch in which Ph.D. Programme is to be offered.
- 2. Number of ratified Professors and other faculty with Ph.D. in the Department/Branch, satisfying the eligible criteria
- 3. Number of Faculty members with Ph.D. in the Department/Branch.
- 4. Has the Department been NBA (NAAC in case of non Engineering departments) Accredited (i) Period of Accreditation (ii) Present Status.
- 5. Research centres should be given only to institutions having NAAC / Departments having NBA, as on the date of inspection
- 6. Assurance from the Institute/Organization regarding Availability of Allotted Supervisor for the Research Programme Period continuously till the thesis submission
- 7. No. of Journal Publications of Department/Branch Faculty in the last 5 years.
- 8. Academic/Infrastructural Facilities available at the Institute/Organization.
 - (i) Library/Laboratory/equipment Facilities (ii) Assurance on the Availability of the Research Laboratory/Equipment to the Scholar as needed (iii) Assured Accommodation for the Scholar within the Dept.
- 9. Networking/Internet Facilities.
- 10. Whether the institute/Organization is willing to offer to the Scholar a minimum fellowship of the amounts are as per AICTE/UGC norms per month for 3 years.
- 11. Whether the Institute/Organization is willing to provide the expenditure for Contingencies/Conferences/Field works/Stationery etc.
- 12. Whether the Institute/Organization is willing to share revenue outcomesif any, and share IPR with JNTUA.
- 13. Number of (i) R & D Projects carried out / completed by the Department (ii) Research or any other Grants Sanctioned to the Department/Branch.
- 14. Any other information regarding Recognition of the Institute/Organization by any other Universities or Academies or councils or Organizations, or MoU with Industries/R& D Labs.etc.

In case of institutions of national and international eminence, the Academic Senate may recognize them as research centres for offering Ph.D. programmes based on the information provided by the institutions and the recommendations of the Committee constituted by the Vice-Chancellor for examining the infrastructure and other facilities.

4. Admission Procedure - Ph.D.

There will be direct admission into Ph.D. Course with PG qualification, or else Ph.D. can be pursued after completing M.Phil/M.S., satisfying the admission procedure, viz., written test followed by interview.

4.1 Eligibility

Ph.D. can be pursued by candidates possessing the minimum qualifications as specified below either on Full-Time (FT)/Part-Time (PT) basis in the Faculties of Sciences, Humanities, Management Studies, Engineering, Courses such as Food Technology, Bio-Technology and Pharmaceutical Sciences.

Admissions into Ph.D. programme will be made within the framework of reservation rules in force prescribed by the Government of Andhra Pradesh from time to time.

a) Educational Qualifications:

(i) For Ph.D.

Engineering/Pharmacy stream candidates must have a basic degree in Engineering/Pharmacy and Post Graduate Degree or equivalent degree in relevant discipline. **Pharm-D** degree holders are also eligible for Pharmacy stream.

(ii) Ph.D. in Computer Science and Engineering:

B.Tech and M.Tech. in Computer Science and Engineering Department or equivalent

or

M.Sc (Comp. Sc) / M.Sc. with mathematics as a subject / M.C.A. and M.Tech. in Computer Science and Engineering or equivalent

(iii) Science, Humanities and Management Stream candidates must possess Post Graduate Degree or equivalent degree in relevant discipline.

(iv) FoodTechnology:

B.Tech & M.Tech in Food Technology/in any of the relevant disciplines, viz., Bio-Technology, M.Sc. in Chemistry/ Microbiology/Biochemistry/ HomeScience/Agriculture/Horticulture/ FoodTech./FoodSciences & Nutrition/Veternary Science/ M.Sc or M.Tech. in Chemical Engineering/Dairy Technology/Bio-Technology or equivalent degree.

(v) Bio-Technology: M.Sc. in Bio-Technology/Chemistry/Botany/ Zoology/Biochemistry/Food-Tech./Microbiology or M.Tech. (Bio-Technology)/or equivalent degree.

If the PG Qualification / M.Phil / M.S is obtained through distance mode, the program must have the recognition of the Joint committee of AICTE, UGC and Distance Education Council.

(vi) The candidate should not have registered for any other course leading to a degree in any other University or Institution and also shall not register during research period.

4.1.1 Full-Time (FT)

- (a). Candidates for admission to M.Phil./M.S/Ph.D. programme shall have a Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 50% marks in aggregate or its equivalent grade 'C' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions. Educational qualifications that are mentioned in 4.1 under (a) and (b) are also applicable.
- (b). A relaxation of 5% of marks, from 50% to 45%, or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently-abled and other categories of candidates as per the decision of the University Grants Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 50% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible only based on the qualifying marks without including the grace mark procedures.
 - (c). The full time Ph.D. courses are offered at the research centers recognized by the University only as notified University website. The centers are required to provide all the necessary facilities to the admitted candidates. The candidates have to stay at the center for the period of the research and are not allowed to take up any teaching or other jobs. All other eligibility, supervisors, course work, admission and fee are same as external candidates.

4.1.2 Part-Time (PT)

Candidate satisfying the eligibility conditions noted under 4.1 and 4.1.1 above can be admitted as Part-time candidate through entrance test, as per the following order of priority. Admission into Part-time category will be made on the basis of service seniority in the respective categories.

- 1. Faculty working in the University or in the P.G. Centres or in affiliated colleges with minimum one year post qualification experience.
- 2. (a) Faculty working in Post graduate and Professional colleges (affiliated institutions and constituent colleges) offering UG/PG, having completed at least one year post qualification experience. This provision is also applicable to Faculty teaching Physics, Chemistry, Mathematics and Humanities in professional colleges.

or

- (c) Faculty working in Polytechnic / Government or private aided Junior Colleges having completed one year post qualification service. Seniority for candidates under each category shall be calculated with the following weightage.
 - (i) Teaching at P.G. level/Professional five points for each completed year of service in colleges as specified in 2(a)
 - (ii) Teaching at graduate level/Professional two points for each completed year of service in colleges as specified in 2(b).
 - (iii) Teaching at Polytechnic/ junior college one point for every completed year of service as specified in 2(c).
- 3. Employees working in research institutes / industries having completed at least five years of service with minimum one year post qualification.

4.1.3 Conversion from Full-Time to Part-Time and Vice-Versa

- (a) Conversion of Full-time Ph.D. candidates into Part-Time Ph.D. scholars shall not be entertained.
- (b) Conversion from Part-time to full-time is permitted.

4.2 Procedure for admission

a. Universities shall admit M.Phil./M.S/Ph.D. students through a Common Entrance Test conducted at the State level on behalf of the Universities concerned.

- b. The Universities shall decide on an annual basis through their academic bodies a predetermined and manageable number of Ph.D. scholars to be admitted depending on the number of available Research Supervisors and other academic and physical facilities available, keeping in mind the norms regarding the scholar- teacher ratio, laboratory, library and such other facilities;
- c. The Universities shall notify well in advance in the institutional website, the number of seats for admission, subject/discipline-wise distribution of available seats, criteria for admission and procedure for admission and all other relevant information for the benefit of the candidates. The same shall be communicated to the Convener for Common Research Entrance Test. In turn the Convener has to notify through advertisement in at least two national news papers of which one shall be regional language.

The advertisement shall contain the information with respect to number of seats for admission, subject/discipline wise, distribution of available seats, criteria for admission, procedure for admission, examination centres and all other related information for the benefit of the Candidates.

d. Admissions to the Foreign nationals will be as per the UGC guidelines.

4.2.1 Entrance Test

University shall admit candidates by a two stage process, i.e., entrance test and interview.

4.2.1.1 Scheme of the Entrance Test

An Entrance test shall be conducted for 180 marks by the state Government. The Entrance Test consists of two parts, i.e., Part-A and Part-B. Part-A shall be the Teaching and Research Aptitude for 90 marks, whereas Part-B shall be the subject specific for 90 marks. There will be 1/6 negative mark for each wrong answer.

4.2.1.2 Syllabus of the Entrance Test

Part-A shall be the Teaching and Research Aptitude on the lines of UGC NET Paper-I Syllabus. For Paper-II, Syllabus shall be Paper II of the UGC NET for the subjects for which UGC is conducting NET; CSIR-NET Syllabus for Sciences; GATE Syllabus for Engineering; and GPAT Syllabus for Pharmacy. For the other subjects, University shall prepare the syllabus.

4.2.1.3 Qualifying marks in the Entrance Test

An Entrance Test shall be conducted with qualifying marks as 50% for open category candidates and 45% for OBC/SC/ST/PH categories.

4.2.1.4 Interview

Qualified Candidates in the Entrance Test will be called for interview/viva-voce by the concerned University Directorate where the candidates are required to discuss their research interest/area through a presentation before a duly constituted Committee. **Interview is for 20 marks.**

Interview Committee shall consist of five members; Director R&D, Director of Admissions, Chairman-Board of Studies and one Senior Faculty member from the Department and one external subject expert nominated by the Vice-Chancellor or any other committee constituted by the Vice-Chancellor of the University.

4.2.1.5 Ranks/Final Marks

Admissions Committee will give ranks/final marks awarded out of 200 after adding the marks of entrance test (180 marks) and interview marks (20 marks).

4.2 Admission without Entrance Test

Ph.D. Admissions shall be given without Entrance Test for those students eligible GATE/GPAT/UGC-NET/UGC-CSIR NET JRF/teacher fellowship holder/National fellowship, etc., twice in a year, i.e., in January and in July of the calendar year preferably. Separate notification will be provided. Candidates having these qualifications will be interviewed by the expert committee and admission will be provided based on performance. The number of admissions is based on availability of the supervisors.

4.4 Allocation of Research Supervisor

- 1. The registration of a candidate can be done either at university department or any Institution recognized by the university as a centre of research.
- 2. The allocation of Research Supervisor for a selected research scholar shall be decided by the Departmental Research Committee (DRC) concerned under the chairmanship of Director R&D depending on the number of scholars per Research Supervisor, the available specialization among the Supervisors and research interests of the scholars as indicated by them at the time of interview/viva voce.
- 3. In case of topics which are of inter-disciplinary nature where the Department concerned feels that the expertise in the Department has to be supplemented from outside, the Department may appoint a Research Supervisor from the Department itself, who shall be known as the

Research Supervisor, and a Co-Supervisor from outside the Department/Faculty/College/Institution on such terms and conditions as may be specified and agreed upon by the consenting Institutions/Colleges.

4. The Number of Research Scholars to be allotted to each teacher is as follows:

A Research Supervisor, who is a Professor, at any given point of time, cannot guide more than three (3) M.Phil., and Eight (8) Ph.D. scholars (both Full-time and Part-time and as a guide or co-guide). An Associate Professor as Research Supervisor can guide up to a maximum of two (2) M.Phil. and six (6) Ph.D. scholars (both Full-time and Part-time and as a guide or co-guide) and an Assistant Professor as Research Supervisor can guide up to a maximum of one (1) M.Phil. and four (4) Ph.D. scholars (both Full-time and Part-time and as a guide or co-guide). However, not more than two Ph.D. scholars should be registered with a supervisor per year.

4.5 Change of Guide

If a candidate wishes to change a guide or a co-guide for valid reasons, the request may be considered by the University as per the merits of the case. However, such cases where the candidate is permitted, he/she can submit the thesis only after one year from the date of change of guide or inclusion of additional guide. Publications with earlier supervisor / co-supervisor satisfying the norms are permitted to submit after one year.

4.6 Change of Area/Topic

Candidate has to submit the application form in the prescribed format for the Change of Topic/area and it will be done based on the recommendation of the Chairman, Board of Studies and with the approval of the Vice Chancellor. However, submission of thesis is permitted only after one year from the date of change of topic/area. The exact title of thesis shall be finalised during the Pre submission seminar by the Pre submission seminar committee.

5. Cancellation of Ph.D

5.1 Cancellation of Ph.D by the Candidate

Full Time Ph.D. scholars shall submit a letter requesting for cancellation of registration with the recommendation(s) of the Supervisor(s) through the Principal of the College where he/she is pursuing Ph.D. Whereas External scholars submit a letter requesting for cancellation of registration with the recommendation(s) of the Supervisor(s) to the University. The request for

cancellation without the recommendation of the Supervisor will not be entertained. Further, a cancellation fee of Rs.3,000/- (Rupees three thousand only) has to be paid by the scholar to the University.

- 1. Candidate shall cancel the admission into Ph.D. programme any time before minimum stipulated period (i.e., Three/Four years as applicable) of Ph.D. programme, however, he/she has to pay the fee till the date of cancellation, i.e., till the completion of that semester in that academic year along with the onetime cancellation fee of Rs. 3000/-(Rupees three thousand only).
- 2. Candidate shall cancel the admission into Ph.D programme at any time after the minimum stipulated period (i.e., Three/Four years as applicable) of Ph.D programme, then, he /she has to pay fee for the minimum period of the programme along with the onetime cancellation fee of Rs. 3000/-(Rupees three thousand only). In case if scholar has already paid fee regularly for a period beyond minimum stipulated period and request for the cancellation of registration, then the fee paid shall not be refunded.

5.2 Cancellation of Ph.D. by the University

A research scholar will be asked for explanation as to why his/her registration cannot be cancelled under any of the following circumstances:

- a) Candidate admission shall be cancelled, if he does not complete his four papers in maximum of five attempts (as per section 6.4)
- b) Wherein the supervisor of a research scholar writes to the University expressing his/her inability to continue as supervisor for the scholar under consideration because of reasons like non-progress of the research work or the scholar not interacting frequently with the supervisor or for any other valid reason.
- c) Wherein the research scholar has started pursuing some other course or accepted any other appointment without the written consent of the University.
- d) Wherein the maximum period for pursuing Ph.D has been completed and the research scholar has not applied for extension of time.
- e) Wherein the research scholar has not paid the fee for more than 3 semesters.

The concerned research scholar has to give a reply within a month from the date of receiving the show cause notice, failing which his/her registration will be cancelled. The explanation given by the research scholar for clause 5 (b) will be submitted to the DRC, which in turn will recommend the future course of action, which may include either cancellation of admission or change of supervisor. The recommendations of the DRC, will be submitted to the Vice-Chancellor for final decision.

The explanation given by the research scholar for clause 5 (a), 5 (c), 5 (d) and 5 (e) will be submitted to the Vice-Chancellor for final decision.

In case the registration is cancelled, the research scholar has to pay a onetime cancellation fee of Rs.3,000/- in addition to the tuition fee as mentioned in the clause (1) and (2) without which his/her certificates will not be returned. Transfer certificate will be issued by JNTUA to all the scholars whose registration has been cancelled.

6. Ph.D. Programme-Course Work and Evaluation

6.1 Duration of the Programme

- a) A full-time Ph.D. student is required to spend the minimum prescribed period of **three years** (maximum of five years) admitted with PG qualification, in the case of admission with **M.Phil./M.S.** minimum of two years (maximum of four years), in the University or in one of the P.G. Centers or Institutions recognized by University as Centers of Research.
- b) The prescribed minimum period for Ph.D. part-time research admitted with M.Phil./M.S. degrees is three years (maximum of five years) and four years (maximum of six years) for those admitted without M.Phil./M.S. A part-time candidate employed in an outside institution will be required to spend at least six weeks every year in the concerned University Department during the prescribed total period of research.
- c) If a candidate pursuing Ph.D. programme under either Full-Time/Part-Time is unable to complete the work in the maximum prescribed period, the Vice-Chancellor of the University can give extension of time up to one year from the date of expiry of registration beyond which the registration of the candidate ceases.
- d) A grace period of 30 Days will be given to the **Ph.D.** Research Scholars after completion of stipulated period for submission of thesis. After 30 days the candidate has to pay the Extension/Re-registration fee as prescribed in fee structure for submission of thesis.

- e) If a candidate has completed the requirement earlier than the prescribed period, the Vice-Chancellor may permit for an early submission of thesis before three months provided that the request is justified and substantiated by publications (all papers must have been published) in refereed journals and same must be recommended by DRC.
- f) Women candidates and Persons with Disability (more than 40% disability) may be allowed a relaxation of two years for Ph.D. in the maximum duration. In addition, the women candidates may be provided Maternity Leave/Child Care Leave once in the entire duration Ph.D. for upto 240 days.

6.2 Review of Progress

A research scholar along with research work carried out shall appear before the Doctoral Committee/Research Review Committee once in six months to make a presentation for evaluation.

6.3 Course Work

- The credit assigned to the Ph.D. course work shall be 16 credits (Four Theory Papers, each 4 credits).
- ➤ Course work for Pre. Ph.D. Examination consists of the following four papers.
 - Paper I: Research Methodology which could also cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, field work, etc. for 100 marks/Four Credits
 - Paper II: Intellectual property Rights which cover the areas such as Patents, Trademarks, copyrights, Industrial designs and Technological and Legal Developments in Intellectual property.
 - Paper III: Advanced Subject Paper/Recent Advances in the Subject for 100 marks/Four Credits
 - Paper IV: Paper on research Area for 100 marks/Four Credits

Subjects related to Paper III and Paper IV shall be prescribed by the guide and DRC.

> Selected papers (Paper I, II, III and IV) cannot be changed in future.

> The subjects selected must be intimated to the Director, R&D with endorsement from the supervisor and co-supervisor (if any). Candidates

will be intimated about the last date for registration of these subjects once the admissions are over.

- The course work shall be completed in four weeks contact program at the University in two spells of two weeks each. The candidate has to acquire minimum of 75% attendance in each spell and in each subject. Otherwise, he/she has to repeat the course work.
- > Pre. Ph.D. examinations are to be conducted before 18 months for all the Research Scholars. The date of payment of fee at the time of admission will be treated as the date of registration.

6.4 Evaluation of Ph.D. Course Work

- ➤ The panel of paper setters and examiners for Paper-I, II, III & IV should be provided by the Chairperson and Board of Studies from the list approved by Board of Studies.
- > Evaluation of the Paper-I, II, III and IV of Course work shall be evaluated with External Examiners.
- A Ph.D. scholar has to obtain a minimum of 50% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the dissertation/thesis.

➤ Grades

Sl. No.	Range of Marks %	Grade	Grade Points	
1.	91-100	0	10	Outstanding
2.	81-90	A+	9	Excellent
3.	71-80	A	8	Very Good
4.	61-70	B+	7	Good
5.	56-60	В	6	Average
6.	50-55	C	5	Pass
7.	<50	F	0	Fail
8.		Ab	0	Ab (Absent)

The candidate must obtain a minimum of C Grade in each theory paper for a pass.

➤ Candidates who fail in first attempt will be given only four more chances to qualify in the examination. Registration for appearing the examination shall not be considered as an attempt.

6.5 Exemption from Pre-Ph.D. Examination

Candidates already holding M. Phil/M.S. degree and admitted to the Ph.D. programme through the admission process, or those who have already

completed the course work in M.Phil/M.S. and have been permitted to proceed to the Ph.D. in integrated course, may be exempted by the University (courses that are completed at M.Phil/M.S. only exempted) from the Ph.D. course work. However, if the supervisor recommends the course work, in such case, it is required to complete the course work though the scholar has admitted with M.Phil/M.S. degree. All other candidates admitted to the Ph.D. programme shall be required to complete the Ph.D. course work prescribed by the University.

6.6 Requirements for the award of Ph.D. Degree

The requirements for the award of a Ph.D. degree are

- a) Candidates should have been passed in Pre-Ph.D. Examinations.
- b) Candidate should have been attended and obtained satisfactory status in 75% of the RRMs conducted before submission.
- c) Candidate should have published at least two research papers in a refereed Journals before the submission of the thesis for adjudication. Minimum one of the journal publications, must be in SCI or SCI-Expanded journals. The other journal publication can be in journals having impact factor given by Thomson Reuters/Science Citation Index Journals or UGC listed journals. Only one co-author other than supervisor/co-supervisor will be permitted. Scholars have to provide the proofs for the approvals of UGC listed journals and others.

In addition, two paper presentations in conferences before the submission of the dissertation/thesis for adjudication and produce evidence for the same in the form of presentation certificates and/or reprints.

- d) Pre-talk/Pre-submission seminar/Open seminar: Prior to the submission of the dissertation/thesis, the scholar shall make a presentation in the Department before the DRC of the Institution concerned which shall also be open to all faculty members and other research scholars. The feedback and comments obtained from them may be suitably incorporated into the draft dissertation/thesis in consultation with the Research Supervisor. Departmental Research Committee should certify the eligibility for submission of the thesis.
- e) After receipt of positive recommendations on the thesis from adjudicators, the candidate should defend the thesis in a viva-voce examination successfully before a committee constituting internal and external examiners, appointed by the Vice-Chancellor.

6.6.1 Plagiarism test

"Plagiarism" includes an act of academic dishonesty and a breach of ethics. It involves using someone else's work as one's own.

Scholars whose Plagiarism similarity is less than or equal to 20% such Scholars shall be allowed for submission of the Thesis. It is emphasized that the 20% plagiarism, excludes self-plagiarism of their research papers contributed for their thesis and references of the thesis submitted for the award of degree.

6.6.4 Submission of the Thesis

- a. After meeting the required criterion and passing Pre-Ph.D. examination, the candidate shall submit his/her thesis on the concerned topic of research.
- b. External Research Scholars shall submit Ph.D. Thesis to the Director, R&D whereas Full time scholars in the Research Centres shall submit their Thesis through proper channel to the Director, R&D.
- c. Prior to submission of the thesis 5 copies of the synopsis along with draft copy of the thesis, should be submitted to the University for the purpose of conducting Pre-Talk.
- d. On completing the research work, the candidate is required to submit Five hard copies of the thesis (soft bound) on the subject of his/her research along with soft copy and one synopsis reports (hard copies) after incorporating all suggested changes by DRC in Pre-Talk.
- e. A candidate may utilize for his/her thesis the contents of any work which he/she may have already published on the subject. But he/she shall not submit the whole or any substantial part of the work for which a degree has been conferred on him/her by the University or any other University. However, papers published prior to the admission shall not be counted for fulfilling the requirement.
- f. The candidate shall enclose to his/her thesis, the printed contribution(s) to the advancement of the subject which he/she has published jointly with supervisors.
- g. The scholar shall invariably publish JNTU Anantapur as affiliation in all his publications required to meet the submission criteria.

6.7 Evaluation of Ph.D. Thesis

1. The Ph.D. thesis submitted by a research scholar shall be evaluated by at least three external examiners, who are not in employment of the same

University, of whom minimum one examiner shall be from IITs/IISc/IIITs (Central Govt.)/Central Government R&D Institutions or Equivalent, and one or two from NITs/Central Universities/State Government R&D Institutions or Equivalent institutions and one or zero examiners shall be from the State Government Universities/State Govt. IIITs within or outside Andhra Pradesh.

The supervisor has to be submit 12 examiners (out of which, 03 examiners from IITs/IIScs/IIITs (Central Govt.)/Central Government R&D Institutions or equivalent, 03 examiners from NITs/Central Universities/State Government R&D Institutions or equivalent, 03 examiners from state Government Universities/State Govt. IIITs outside Andhra Pradesh and 03 examiners from state Government Universities/State Govt. IIITs within Andhra Pradesh.

Vice-Chancellor, shall recommend only three examiners out of 12 examiners submitted by the Supervisor and Co-Supervisor.

If the panel of the examiners is not satisfied by the Vice-Chancellor, then the panel of examiners shall be taken from the DRC/from experts in that area by the Vice-Chancellor directly.

Vice-Chancellor shall recommend the three examiners from any of the four groups cited.

- 2. The Adjudicator's summary report of the thesis should be accompanied by a detailed report with the following options. In case the thesis is recommended for revision or rejected outright, the reason for the same has to be incorporated in the report.
 - a) The Thesis attains the required standards for the Award of Ph.D. degree.
 - b) The thesis requires revision and submission to the Doctoral Committee.
 - c) The thesis requires revision and re-submission for re-evaluation by the same examiner.
 - d) Thesis is Rejected.

The Doctoral committee shall check and verify the answers to the comments made by the examiners only and they shall not evaluate whole thesis. If the answers are satisfactory and incorporated in the final thesis then the committee shall recommend for the viva voice examination else recommends for the proper incorporation of the comments or suggestions made by the examiners once again.

3. The University decision shall be as per the following.

S. No.	Examiner 1	Examiner 2	Examiner 3	Decision of the University
1.	Accept	Accept	Accept	Accepted for conducting Viva- voce
2.	Accept	Accept	Revise	Revise the thesis and send to examiner / Doctoral committee for acceptance
3.	Accept	Revise	Revise	Revise the thesis and send to examiners / Doctoral committee for acceptance
4.	Revise	Revise	Revise	Revise the thesis and send to examiners / Doctoral committee for acceptance
5.	Revise	Revise	Reject	Send to the fourth examiner after revision If the fourth examiner rejects, it is rejected. If the fourth examiner recommends for revision, then revise as per the three examiners and send it to examiners / doctoral committee If the fourth examiner accepts the thesis, then revise the thesis as per 1st and 2nd examiners, and send it to examiners / doctoral committee. If doctoral accepts, conduct the viva voce.
6.	Revise	Reject	Reject	Thesis is rejected
7.	Accept	Revise	Reject	Thesis is revised as per the 2 nd and 3 rd examiners and send it to 4 th examiner. If fourth examiner, accepts/revise the thesis, then thesis is revised and send it to the examiner / doctoral committee. If examiner/doctoral committee accepts, viva-voce is conducted.

Diet Deiet Thesis is rejected	8.	Accept	Accept	Reject	Thesis is sent to the fourth examiner. If the thesis is accepted, then viva-voce is conducted If thesis is recommended for revision, then the thesis is revised and send it to the examiner / doctoral committee. If doctoral committee accepts the thesis, viva-voce is conducted. If thesis is rejected by fourth examiner, then thesis is sent to fifth examiner. If thesis is rejected then thesis will be rejected. If thesis is recommend for revision, then the thesis is revised and send it to the examiner / doctoral committee. If doctoral committee accepts the thesis, viva-voce is conducted.
9. Accept Reject Reject Thesis is rejected. 10. Reject Reject Thesis is rejected.	9.	Accept	Reject	Reject	Thesis is rejected.

The gist of the above mentioned table is that the scholar is permitted to attend viva-voce examination only if three positive reports are obtained. The University Vice Chancellor shall appoint the doctoral committee.

Expediting Evaluation Process

The University shall develop appropriate methods so as to complete the entire process of evaluation of Ph.D. thesis within a period of one year preferably from the date of submission of the thesis.

6.8 Ph.D. Open Viva-voce examination

a) The open viva-voce of the research scholar to defend the dissertation/thesis shall be conducted only if the evaluation report(s) of

the external examiner(s) on the dissertation/thesis is/are satisfactory and include a specific recommendation for awarding the Ph.D. Degree.

b) The viva-voce relating to Ph.D. thesis shall be conducted by a viva-voce committee to be nominated by the Vice-Chancellor.

The viva-voce committee shall consist of

- 1. Research Supervisor and Co-supervisor (if any)
- 2. One of the examiners who adjudicated the thesis (to be nominated by the Vice-Chancellor)
- 3. The Head of the Department (all the concerned Heads, in the case of inter disciplinary).
- 4. The Chairperson of the Board of Studies (all the concerned chairpersons, in the case of inter-disciplinary) Optional
- 5. Director (R&D) Optional

The decision of internal examiner (one of the supervisors) and external examiner is final for the award of the degree.

- c) In case if the guide superannuates from the University service or is on long leave/ deputation or cannot attend on any other valid reasons the coguide/ Chairperson will be the convener.
- d) The viva voce is open to all members of the department and allied departments. The candidate shall have to successfully defend his/her Thesis work.
- e) A candidate who is not successful at the Viva-Voce may be permitted to take the viva-voce a second time within a period of three months. No candidate shall be permitted to take the viva-voce more than twice. If the candidate fails for the second time, the case shall be disposed off by the Vice-Chancellor on its merits.
- f) After the completion of the Viva-Voce examination, the Viva-Voce Committee will submit the recommendations along with the Corrected final copy of the thesis in Hard Bound and two soft copies in DVD form for placing them in the University library and on INFLIBNET through UGC, respectively to the Directorate of R&D.

g) The Ph.D. degree shall be awarded only after uploading of the thesis in INFLIBNET (Shodhganga).

7. Provisional Certificate

Prior to the actual award of the degree, the University shall issue a provisional Certificate to the effect that the Degree has been awarded in accordance with the provisions of the UGC Regulations, 2016.

9. List of Research Scholars on website

The University 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 candidate, topic of his/her research, name of his/her supervisor/co-supervisor, date of enrolment/registration.

10. Depository with SHODHGANGA INFLIBNET

Following the successful completion of the evaluation process and before the announcement of the award of the Ph.D. degree(s), the R & D directorate shall submit an electronic copy of the Ph. D. thesis to the SHODHGANGA INFLIBNET, for hosting the same so as to make it accessible to all Institutions/Colleges.

11. M.Phil./M.S. degrees awarded by foreign Universities

If the M.Phil / M.S degree is awarded by a Foreign University which is considered as pre-requisite for Ph.D admission, University shall recommend such a degree to a Standing Committee constituted by the University for the purpose of determining the equivalence of the degree awarded by the foreign University.

12. Fee Details

Tuition fee per Semester:

Rs. 20,000/-

(50% concession is given for adhoc faculty working in constituent units)

Tuition fee per Semester for Regular faculty of the University: Rs 2500/-

Fees for submission of Thesis:

Rs. 20,000/-

The fee to be paid on stipulated time as given below regularly every year till the successful submission of the thesis or the Cancellation of the admission as the case may be.

	Odd Semester	Even Semester
Without late fee	1-31st July	1-31st January
With late fee of Rs 500/-	1-10th August	1-10 February
With late fee of Rs 1000/-	11-20th August	11-20th February
With late fee of Rs 1500/-	Till the end of August	Till the end of February

With late fee of 1/3 of tuition fee	Beyond 31st August	Beyond last day of February
icc	Beyona 315011agast	1 0014447

Grace period of 30 days is extended to all scholars for thesis submission i.e., up to end of 31st July every year without any fee. Further, scholars whose maximum duration of the programme is not completed and willing to submit the thesis on or before 31st December, have to pay semester fee only. Scholars who submit the thesis after 31st December shall pay full tuition fee. Also, scholars whose maximum duration of the programme is completed, shall go for extension after 30th June and before 31st July and shall pay tuition fee as per above.

13. General

- a. Extra Mural research admissions are not offered by the University for this academic year.
- b. Admissions to M.Phil. and M.S. programmes are not offered by the University for this academic year.
- c. No stipend will be paid by the University for Full Time or External research scholars admitted in constituent/affiliated colleges.
- d. Hostel facility is not provided by the University for Full Time or External research scholars.
- e. The academic regulations should be read as a whole for purpose of any interpretation.
- f. Malpractices rules-nature and punishments are as per the PG regulations of the University.
- g. Wherever the words "he", "him", "his", occur in the regulations, they also include "she", "her", "hers", respectively.
- h. The words Part time and External are used interchangeably.
- i. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice-Chancellor is final.
- j. The University may change or amend the research regulations or syllabi at any time and the changes or amendments shall be made applicable to all the students on rolls with effect from the dates notified by the University.
- k. The registration of a Ph.D. scholar may be cancelled by the University within the stipulated period, if the candidate fails to satisfy the conditions stipulated in the admission order or violate the rules and regulations of Ph.D. after giving notice to the concerned candidate.
- 1. The admitted candidates are advised to see the JNTUA website www.jntua.ac.in for instructions from time to time.

For any clarifications, candidates can contact concerned University officials.