Notification for Doctor of Philosophy Programme in Engineering, Pharmacy, Management & Computer Science

Gujarat Technological University Ahmedabad invites application for admission in Doctor of Philosophy (Ph.D.) Programme in disciplines of Engineering, Pharmacy, Management and Computer Science for the Academic Year 2017-18

1) Eligibility Criteria for Admission to Ph.D. Programme:

1.1 Full-Time Research Scholars

- a) Candidates for admission to the Ph.D. programme shall have a Master's degree or a professional degree declared equivalent to the Master's degree with at least 55% marks in aggregate or its equivalent grade 'B' 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 and submitting an Equivalence Certificate issued by Association of Indian Universities for the same.
- b) Candidates possessing Postgraduate Diploma in Management with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) have to submit an institutional certificate obtained from Association of Indian Universities that their Two Year Full-Time Postgraduate Diploma in Management has been equated with MBA Degree for the purpose of admission to higher Degree.
- c) CA, CMA, and CS qualified candidates with at least 55% marks and who are registered with Institute of Chartered Accountants of India or the Institute of Cost Accountants of India or the Institute of Company Secretaries of India are also eligible to apply.
- d) Candidates having cleared Master's Degree or a professional degree declared equivalent to the Master's Degree (as per UGC specification of Degrees) with atleast 55% marks in aggregate or its equivalent grade 'B' in the UGC-7 point scale (or an equivalent grade in a point scale wherever grading system is followed) through the medium of MOOCs available on a SWAYAM platform are also eligible to apply for admission to Ph.D. Programme, provided they submit:
 - (i) A Certificate from the Parent Institution/University stating equivalent credit weightage has been assigned to the students for the credits earned in the MOOCs opted by him/her through SWAYAM platform in the credit plan of the programme offered by the Parent Institution/University; wherein it should be categorically specified that MOOCs opted by any student has been allowed only for 20% of the total courses offered in a particular program in a semester by the Parent Institution/University (as per UGC Guidelines for MOOCs).
- e) A relaxation of 5% of marks, from (55% to 50%), or an equivalent relaxation of grade, is allowed for those belonging to SC/ST/SEBC (non-creamy layer)/Differently-Abled or for those who had obtained their Master's degree prior to 19th September, 1991.

1.2 Part-Time Research Scholars

- a) Full-Time teachers of University Departments/University/Colleges affiliated to the University or any working employee of institution of higher learning in Gujarat. Full-Time persons working in Gujarat at R&D Departments/National Laboratories/Units of Government/Quasi Government or any other research laboratories or are sponsored by the respective employer (having not less than 2 years of relevant experience) are eligible to apply under Part-Time Ph.D. Programme, provided they fulfil the eligibility norms mentioned in sub-section 1.1.
- b) Candidates shall submit a 'No Objection Certificate' on the letterhead duly signed by the appropriate authority of the employer organization clearly stating the following-
 - (i) The candidate is permitted to pursue studies on a Part-Time basis
 - (ii) That his/her official duties permit him/her to devote sufficient time for research.
 - (iii) He/She will be fully relieved from duty as and when required by the University.
- c) Candidates shall also submit endorsed documents that the laboratory/experimental facility is available at their proposed place of work or if they plan to do experiment in any other University/institute etc. then the candidate must produce a "No Objection Certificate" (NOC) from the respective HOD/Director of the University/Institute etc.

1.3 Full-Time Sponsored Research Scholars

- a) Regular teachers of University Departments/University/Colleges affiliated to the University or any working employee of institution of higher learning, full-time employees working in Gujarat at R&D Departments/National Laboratories/Units of Government/Quasi Government or any other research laboratories or are sponsored by the respective employer, having not less than 2 years of relevant experience are eligible to apply under Full-Time Ph.D. Programme provided they fulfill the eligibility norms mentioned in sub-section 1.1. and are fully relieved for the period of study
- b) Such candidates shall submit an additional 'Certificate' on the letterhead duly signed by the appropriate authority of the employer organization clearly stating the following-
 - (i) For the period of his/her studies in the Programme, the candidate would be treated as on duty with usual salary and allowances, and
 - (ii) That he/she will be fully relieved and granted study leave for a minimum period of 3 years at the time of admission
- c) If in case, the candidate fails to submit his/her Thesis within the stipulated time (for which he/she has been granted study leave), he/she shall request for further extension with recommendation letter by his/her Supervisor and DPC Members and shall submit a letter of approval for extension on the letterhead, duly signed by the appropriate authority of the employer organization where he/she is working.

2) Duration of the Programme:

Categories	Minimum No. of Years	Maximum No. of Years
Full-Time Research Scholars	3	6
Part-Time Research Scholars	4	6

- a) The maximum number of years may be extended by another one year on approval from the Vice Chancellor based on recommendation of the Supervisor stating valid reasons. The Research Scholar will have to pay the semester fees till the submission of Synopsis. However, under very special and compelling circumstances, the Vice Chancellor may grant an additional grace period subject to payment of double the semester fees, till the submission of Synopsis.
- b) In case, the Scholar fails to submit the final Thesis within the stipulated time, he/she will have to get re-registered. For re-registration, the fees and period shall be the same as for a fresh candidate. But the Research Scholar shall be exempted from writing the Entrance Test, appearing for the Research Proposal Presentation and passing course work.
- c) The women candidates and Differently-Abled persons (more than 40% disability) will be allowed a relaxation of two years in the maximum duration for Ph.D. subject to submitting an application clearly mentioning the purpose of such relaxation and recommended through the Research Supervisor.
- d) In addition to the clause (c) above, women candidates will be provided Maternity/Child care leave once in their entire duration of Ph.D. Programme for a maximum of 240 days only. This period shall be over and above the allowed additional relaxation of two years subject to recommendation by the Supervisor and submitting a certificate from registered Senior Medical Officer.
- e) All candidates will have to submit the requisite semester fees for continuation of their enrolment within the stipulated time period.

3) Seat Allocation

3.1 As the expertise in the branches is available across disciplines and to promote interdisciplinary research, the following combination of branches is considered-

Combination of Branches	Group
Computer Engineering , Information Technology, Computer Science, Instrumentation and Control Engineering, Biomedical Engineering, Power Electronics, Power Electronics & Electrical Drives, Electronic and Communication Engineering & Electrical Engineering	G-1
Civil Engineering, Environmental Engineering, Environmental Management, Infrastructure Engineering	G-2
Mechanical Engineering, Mechatronics, Metallurgy Engineering, Armament Engineering, Energy Engineering, Textile Engineering	G-3
Chemical Engineering, Rubber Engineering , Plastic Engineering	G-4

- 3.2 Candidate aspiring for taking admission in the above combination of branches may opt for any of the Supervisors in that group.
- 3.3 All Candidates taking admissions shall be reviewed in the branch for which they had applied for (i.e. if a candidate has applied for admission in Computer Engineering branch,

he/she has to be reviewed by the expert panel in Computer Engineering branch only; even though his/her Supervisor has got recognition in Electrical Engineering branch).

4) Reservation Policy

4.1 Reservation of seats

- a) For the purpose of admission, the seats shall be reserved for the candidates who are of Gujarat origin and falling under the following categories and in following proportion, namely:-
 - (i) 7% for Scheduled Castes (SC)
 - (ii) 15% for Scheduled Tribes (ST)
 - (iii) 27% for Socially & Economically Backward Class- SEBC (Non-creamy layer)
- b) A candidate seeking admission on reserved seat shall be required to produce a Certificate of Caste; provided that the candidate belonging to socially and educationally backward classes shall be required to produce a certificate to the effect of non-inclusion in Creamy Layer in addition to the caste certificate.
- c) No caste certificate shall be valid unless it is duly stamped, signed and issued by the authority empowered by the Government of Gujarat.
- d) No certificate to the effect of non-inclusion in Creamy Layer shall be valid, unless it is duly stamped, signed and issued by the authority empowered by the Government of Gujarat.
- e) If a candidate fails to submit the certificates at the requisite time, as required under subclause (b) mentioned above within the stipulated time, his/her candidature shall be considered for admission under unreserved category.
- f) The admission of a candidate of a reserved category on a reserved seat shall be valid subject to substantiation of caste certificate issued to him/her by the authority empowered by the Government of Gujarat in this behalf. In case, the caste certificate is found to be invalid on verification at any stage, he/she shall not have any right to claim his admission on reserved seat and if he/she has already been granted admission, such admission shall be cancelled.
- g) Vacant seats of ST category shall be transferred to SC category and vice-versa whenever necessary to fill-up the number of vacant seats.
- h) In case, no eligible reserved candidates are available, the vacant seats in the reserved category shall not be filled by any non SC/ST candidates.

4.2 Reservation for Physically Disabled Candidates

a) Three percent (3%) of the available seats in each category shall be reserved, in accordance with the provisions of the Persons With Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (1 of 1996), for the persons with disability who can perform the academic activities in the respective course. A candidate with disability shall have to submit certificate of disability issued and duly signed by the competent medical authority. [Where a Differently-Abled is a person with physical disability suffering from not less than forty percent (40%) of this disability as per The Persons with Disabilities Act, 1995; subject to submitting certificate of disability issued and duly signed by the competent medical authority] (as per the format prescribed by the Government of Gujarat)

5) Admission Process:

5.1 Procedure for Application

- a) Online Applications for admission to Ph.D. Programme will be invited once in a year through advertisement including University's website.
- b) Candidates desirous of admission into the Ph.D. Programme shall submit the online application form available on www.gtu.ac.in, along with the processing fee of Rs 1200/- (Rupees One thousand two hundred only) for Open Category & Rs 1000/- (Rupees One thousand only) for SC/ST/SEBC/Differently-Abled Category, to be paid online only.

5.2 Entrance Test

- a) The Entrance Test of applicants shall be conducted by the University. It shall consist of MCQs, wherein 50 marks of Research Methodology (Paper-I) of one hour will be followed by 50 marks of Subject Specific (Paper-II) of one hour for each discipline having 1 mark each with no negative marking.
- b) Entrance Test shall be qualifying with qualifying marks of 50%. Qualifying marks for SC/ST/SEBC (non-creamy layer)/Differently-Abled candidates will be of 45%.
- c) Results of Entrance Test and Research proposal presentation shall be valid for one year only. (Please refer **Annexure- III** for Instructions to candidates for appearing in Entrance Test)

A. Exemption from Entrance Test:

Candidates with one or more of the following qualifications are exempted from appearing in Entrance Test:

- (i) Qualified UGC-NET(including JRF)
- (ii) Qualified UGC-CSIR NET(including JRF)
- (iii) Qualified SLET
- (iv) Qualified GATE
- (v) Qualified GPAT
- (vi) Foreign Scholars who apply through Ministries of Government of India or Foreign Scholars under a Cultural Exchange Scholarship Programme of Government of India.
- (vii) Teacher fellowship holder
- (viii) Passed M.Phil. programme
- (ix) Teachers affiliated to the University departments or affiliated colleges having not less than 15 years of Full Time teaching experience subject to submitting 3 letters of recommendations from eminent academic experts (not below the rank of a Professor) in the proposed research field. Such letters of recommendation must corroborate the claims of having enough knowledge of the subject / discipline. It may be noted that such candidate must not have claimed relaxation under the category for those who have obtained their Master's Degree prior to 19th September,1991.

B. Syllabus for Entrance Test:

- The syllabus of Paper-I will be based on Research Methodology (Annexure-I).
- The syllabus of Paper-II will be Subject Specific as mentioned below:

- (i) All Engineering branches: GATE syllabus [except quantitative/general aptitude and engineering mathematics]
- (ii) Pharmacy: GPAT syllabus
- (iii) Management and Computer Science: GSLET/CAT/MAT syllabus
- (iv) Environment Engineering: syllabus as per Annexure-II

5.3 Research Proposal Presentation

- a) A Research Proposal Presentation shall be organized for those candidates who have successfully cleared the Entrance Test or are exempted from Entrance Test. Such candidates shall be required to discuss their research interest/area through a presentation before an Expert Committee. (Please refer **Annexure-V** for Instructions to candidates for appearing in Research Proposal Presentation).
- At the time of Admission, candidates will have to mandatorily submit printout of the Application form along with self-attested documents whichever applicable (as per Annexure-VI) and receipt of processing fee paid, failing which his/her candidature shall be cancelled forthwith.
- c) Candidates will be evaluated on the basis of their performance, on the following parameters which shall consider the following aspects, viz. whether:
 - (i) The candidate possesses the competence for the proposed research;
 - (ii) The research work can be suitably undertaken at the proposed Institution/College
 - (iii) The proposed area of research can contribute to new/additional knowledge.
- d) Research Proposal Presentation/Interview shall comprise of Maximum Marks=100.
 - Distribution of marks for Research Proposal Presentation/Interview
 - 40 marks for relevant content of the research proposal and candidate's competence for the proposed research.
 - 30 marks for contribution of proposed research work to new/additional knowledge.
 - o 30 marks for question answers.
- e) Selection for admission to Ph.D. Programme will be as per following subject to availability of vacant seats in order of merit and consent of one of the Supervisors who has declared seats for taking the students in the particular academic year.
 - 1. Scoring greater than sixty percent marks (>60%) for candidates belonging to Open Category during Research Proposal Presentation.
 - 2. Scoring greater than fifty five percent marks (>55%) for candidates belonging to SC/ST/SEBC (non-creamy layer)/Differently-Abled Categories during Research Proposal Presentation.
- f) The following will be considered for determining merit for cases where candidates have equal merit marks
 - (i) Aggregate %/CPI/CGPA in PG
 - (ii) Aggregate %/CPI/CGPA in UG
 - (iii) Date of Birth (the older candidate will be given preference)

- g) The selection of candidates for provisional admission shall be based on Entrance Test and Research Proposal Presentation.
- h) A candidate who remains absent during the scheduled Research Proposal Presentation shall be treated as not interested to pursue Ph.D. from the University and his/her candidature shall be cancelled forthwith and will not be called during subsequent rounds, if arranged.
- i) The University will not provide TA or accommodation for appearing in the Entrance Test or Research Proposal Presentation.
- j) No person should supervise his/her "Close Relation". The term "Close Relation" includes wife, husband, son, daughter, sister, brother, nephew, niece, grand-nephew, grand-niece, uncle, aunt, first cousin, son-in-law, daughter-in-law of the Supervisor and also the nephew, niece, grand-nephew, grand-niece of Supervisor's spouse.

5.4 Enrolment

Candidates whose selection is recommended by the Interview Committee and approved by the competent authorities subject to availability of vacant seats in order of merit will be offered admission and will have to deposit prescribed fee along with enrolment form. After generation of enrolment number, he/she shall be designated as "Research Scholar (RS)". The date of enrolment of a Research Scholar will be considered for calculation of time period for all practical purposes by the University.

6) Details for Ph.D. Course Fees:

Particulars	For Open Category Candidate (Rs.)	For SC/ST/SEBC Candidates (Rs.)
Tuition Fee ^ (per semester)	12000	10000
Registration Fee	1000	1000
Caution Money Deposit	1000	1000
Enrolment Fee	150	150
Other Fee	200	200
Thesis Evaluation fee	8000	8000

^The candidates residing outside the state of Gujarat will have to pay the Tuition fees of Rs. 40,000/- per semester. Foreign candidates will have to pay the Tuition fees as per norms of the University.

6.2 Policy for refund of fee on cancellation of admission from Ph.D. Programme:

Sr. No.	Percentage of return of Aggregate fee	Point of time when notice of withdrawal of admission is served to the University
1	100%	15 days before the formally- notified last date of submission of enrolment form
2	80%	Not more than 15 days after the formally- notified last date submission of enrolment form
3	50%	More than 15 days but less than 30 days after formally-notified last date of submission of enrolment form
4	00%	More than 30 days after formally-notified last date of submission of enrolment form

- 6.3 In case of 1 above, Rs. 1200/- will be deducted as processing fee by the University.
- 6.4 The fee is subject to revision by the University at its discretion and the Research Scholars will have to pay the revised fee as and when made applicable.
- 7) It may be noted that appearing for the Research Proposal Presentation will not entitle a candidate for any claim on Ph.D. admission if he/she is not fulfilling the required eligibility conditions for admission which will be thoroughly verified at the time of admission, if granted. If, at any stage, of pursuing the Ph.D. programme it is found that any candidate does not fulfil the minimum eligibility requirements, his/her candidature will not be considered for admission and if the admission is granted, it shall be cancelled forthwith.

In case of any dispute, the decision of the Vice Chancellor shall be final and binding.

SYLLABUS FOR RESEARCH METHODOLOGY PAPER – I (PART A)

This part is common to all the candidates and will cover topics related to General information and its interface with society to test the candidate's awareness and aptitude for scientific and quantitative reasoning. Questions would be so designed to judge the reasoning, creativity, analytical ability and research aptitude of a candidate.

I. Research Aptitude

- Research: Meaning, characteristics and types;
- > Steps of research;
- Methods of research;
- > Research Ethics;
- Paper ,article, workshop, seminar, conference and symposium;

II. Reasoning (Including Mathematical)

- Number series; letter series; codes;
- > Relationships; classification.

III. Logical Reasoning

- ➤ Understanding the structure of arguments;
- > Evaluating and distinguishing deductive and inductive reasoning;
- Verbal analogies: Word analogy-Applied analogy;
- Reasoning Logical Diagrams: Simple diagrammatic relationship, multi-diagrammatic relationship;
- Venn diagram; Analytical Reasoning.

IV. Data Interpretation

- > Sources, acquisition and interpretation of data;
- > Quantitative and qualitative data;
- Graphical representation and mapping of data

Syllabus for Environmental Engineering

Gravimetric analysis, titramateric analysis and instrumental analysis: Significance of pH, Solids, Acidity, Aklanity, COD, DO, BOD, Hardness, Sulphate, Fluoride, Chloride, Turbidity, spectrophotometry, colorimetry, chromatography.

Water supply & sewage system: Design of water distributions system, design of sewage collection system, sources of water & its quality.

Water & Wastewater treatment:- Primary, secondary & tertiary treatment, screens, grit chamber, coagulation, flocculation, sedimentation, biological treatments of wastewater (aerobic & anaerobic), adsorption, disinfection, filtration, water softening, reverse osmosis, ion exchange method, sludge treatment & disposal.

Air pollution:- Sources & effects of air pollutants, criteria air pollutants, effects of meteorological parameters on ambient air quality, thermal inversion, control of particulates, Ambient Air quality Standards & limits.

Noise Pollution: Noise as a pollutant, measurement of noise, units of expressions, effects of noise, permissible limits.

Environmental Impact Assessment & Legislation: Sustainable Development, EIA as a four step activity, Need for EIA, EIA Notification 2006& its requirement, EPA 1986, Water Act 1974, Air Act 1986 Hazardous Waste Management Rules, Environmental Audit.

Industrial Water Pollution: Principles of water pollution control-Reduction of strength & volume, Neutralization, Equalization, Discharge standards, Effluent Standards, Stream Standards, Effluent Quality and treatment flow sheet for dairy industry, textile process house and distillery.

Municipal solid waste management: Municipal solid waste characteristic, Quantities, composition and generation, engineered system for solid waste management, secured landfill site, energy recovery.

Water requirements: Quality standards, Hydraulic design of sewer, basic unit processes and operations for water treatment, Design of Facilities for Physical, Chemical Treatment of Waste Water. Drinking water standards, water requirements, basic unit operations and unit processes for surface water treatment, Sewage and sewerage treatment, quantity and characteristics of wastewater. Effluent discharge standards.

Domestic wastewater treatment: quantity of characteristics of domestic wastewater, primary and secondary treatment, Unit operations and unit processes of domestic wastewater.

Air Pollution: Types of pollutants, their sources and impacts, air pollution meteorology, air pollution control, air quality standards and limits.

Municipal Solid Wastes: collection and transportation of solid wastes.

Solid & Hazardous Waste Management: Definition of hazardous waste, The magnitude of the problem, Risk assessment, Environmental legislation, Characterization and site assessment, Waste minimization

and resource recovery, Physico-chemical treatment, Transportation of hazardous waste, Ground water contamination, Landfill disposal.

Environmental Impact Assessment Concept of EIA, Short term versus long term impacts, Cumulative impacts, Environment setting, Prediction & Assessment of impact of physical biological and socio – economic environment projects, Methods of Analysis, Methods of Analysis of impact on environment., Public Participation concept, Notification and its interpretation. Environmental Legislation: Need for environment legislation, National and State level legislation for prevention of air and water pollution, Function of Pollution Control Boards, Difficulties encountered in enforcing legislation. Environment Audit, Objectives, Concepts, Methodologies & Benefits.

Please read the instructions given below carefully before applying

CANDIDATES SHOULD SUBMIT ONLY ONE APPLICATION FORM WITH VALID DETAILS. DO NOT SUBMIT DUMMY APPLICATION DETAILS WITH SAME CHALLAN NUMBER, AS IT WILL BE TREATED "MULTIPLE APPLICATIONS" AND BOTH THE APPLICATIONS WILL BE REJECTED.

- 1) The applicant must ensure their eligibility for Ph.D. admission 2017-18 in respect of qualifications and other requisite criteria and only then apply. Online application form can be filled from University's website www.gtu.ac.in after ensuring eligibility and other requisite criteria as published in the Detailed Notification available on website by the candidate.
- 2) Deposit the requisite application fee of Rs. 1200/- for Open Category and Rs. 1000/- for SC/ST/SEBC/Differently-Abled Category through SBI online payment (link given at the right side of the Ph.D. Programme). Application fee is not refundable in any case.
- 3) Before applying Online, a candidate should ensure availability of following details: Date of Birth, Caste Certificate No. & Date of issuance (if applicable), Non-Creamy layer Certificate No. & Date of issuance (if applicable), Physical Disability Certificate No. & Date of issuance (if applicable), Marks obtained in various examinations from class X onwards, experience in years & months (if applicable), Reference no. on SBI challan generated through Online payment, scanned copy of the passport size photograph and signature less than 100 KB, etc.).
- 4) A candidate, who has applied informally and sent his / her bio-data / academic vitae to the University earlier, must apply again following the due procedures. Further, application or CV / Bio-data send through e-mail etc. will not be considered under any circumstances.
- After successfully submitting the application online, candidate will be assigned system generated Application Number which should be noted by him/her for further reference. The candidate is required to take print out of the Application Form (on A4 size paper), which has be to duly signed by him/her and shall attach self-attested requisite certificates and a copy of Bank Challan receipt, etc. and must be produced at the time of Admission.
- 6) Application filled after last date notified will not be entertained and no further correspondence will be made in this regard.
- 7) University will not be responsible for any delay at any stage. No correspondence / queries will be entertained regarding delays, conduct and result of interview and reasons for not being called.
- 8) The University reserves the right not to admit any candidate in any discipline if none is found suitable / eligible by the Expert committee.
- 9) The University reserves the right to alter / insert any corrections / additions in the advertisement / website etc. in the event of any typographical error is observed before the last date prescribed for the receipt of applications.
- 10) The decision of the University in all matters will be final and binding. No correspondence / intrim enquiry will be entertained from the candidates in connection with the process of selection / interview.
- 11) No accommodation / travel allowance etc. will be provided by the University. Candidates are advised to refer the website for any updates etc.

PLEASE NOTE:

- (i) Candidates should note that their candidature is strictly provisional.
- (ii) Candidates should strictly adhere to the procedure of submitting Online Application form, failing which; it will lead to summary rejection of application.
- (iii) Mode of payment of fee is through online SBI portal. Fee submitted through any other mode will not be accepted. Fee once paid will neither be adjusted for any subsequent examination nor refunded under any circumstances.
- (iv) Application submitted in any other format will be summarily rejected and no correspondence, in this regard, will be entertained. Hence, the candidates are advised in their own interest to apply early enough to ensure timely submission of their applications on or before the closing date & time.
- (v) The applicant must ensure their eligibility for Ph.D. admission 2017-18 in respect of qualifications and other requisite criteria and only then apply. Online application form can be filled from University website www.gtu.ac.in by the candidate after ensuring eligibility and other requisite criteria as published in the Detailed Notification available on website.
- (vi) No correspondence will be entertained for any matter for which last date has expired.

<u>Important Instructions for Ph.D. Entrance Test – 2017</u>

- 1) THE HALL TICKET MUST BE RETAINED TILL THE DECLARATION OF FINAL RESULT.
- 2) Please occupy your seat at least 30 minutes before the commencement of the test. No candidate will be allowed to enter in examination hall after the start of the examination.
- 3) The Venue of the Entrance Test, Exam Date & Timings will be displayed on the website.
- 4) Every correct answer will be awarded 1 mark. There will be no negative marking.
- 5) Admission to the Entrance Test is strictly provisional. It may be noted that possessing Hall Ticket and appearing for Research Proposal Presentation will not entitle a candidate for any claim on admission if he/she is not fulfilling the required eligibility conditions for admission as prescribed in the Detailed Notification and Eligibility Criteria for admissions in Ph.D. Programme which will be thoroughly verified at the time of admission, if granted. At any stage if it is found that any candidate does not fulfil the minimum eligibility requirements, his/her candidature will not be considered for admission and if the admission is granted, it shall be cancelled forthwith.
- 6) Use of books, notebooks, cell phones/mobiles any electronic gadgets etc. is strictly prohibited in the examination hall.
- 7) Impersonation, use of unfair means shall lead to cancellation of the candidature.
- 8) Candidates will bring their own black/blue ball pen to answer on OMR sheet by darkening the appropriate circle
- 9) Candidates shall not be allowed to carry anything except Hall Ticket and Pen in the Hall.
- 10) No request regarding scrutiny/re-evaluation of the answer sheets of the tests will be entertained in any case, at any stage.
- 11) Hall Tickets / Admit Cards can be downloaded from University Website as and when notified.
- 12) No accommodation and travel allowance shall be provided by the University for appearing in the Entrance Test.
- 13) Candidates are informed to keep checking the University website for regular updates.
- 14) In case of any dispute, the decision of the University will be final and binding.

Important Instructions for Research Proposal Presentation

- 1) No requests for change of Research Proposal Presentation date, timings, schedule etc. will be entertained. The Candidates have to strictly adhere to the Research Proposal Presentation schedule.
- 2) At the time of Admission, all candidates are required to submit two (2) self-attested copies of the proposed Research Proposal. However, it may be noted that appearing in Research Proposal Presentation will not entitle a candidate for any claim on admission if the research proposal submitted by him/her does not suffice the standards of the quality research to be pursued at such level.
- Candidates shall remain present in person at the time of Research Proposal Presentation, failing which their candidature shall automatically stand cancelled. No request for representation shall be entertained at any cost.
- 4) Candidates should approach Supervisors and discuss their area of interest in research. However, it should be noted that Literature review is must for identifying the research gap. The expert panel will be examining on the following-

The candidate possesses the competence for the proposed research;

The research work can be suitably undertaken at the proposed Institution/College

The proposed area of research can contribute to new/additional knowledge.

a. Candidates will be required to demonstrate to the panel, how well have the papers from standard journals been read and analyzed.

Thus, the proposal should clearly demonstrate that

- a) A good literature review has been carried out,
- b) The work you propose to do, have not been tried earlier and
- c) It will make a substantial impact in the domain
- b. Guidelines for research proposal-
 - Proposed topic of research (title page)
 - Name, designation and affiliation of the candidate (title page)
 - Introduction
 - Literature survey
 - Problem definition and objectives of research work (includes relevant content of the research proposal/ candidate's competence for the proposed research)
 - Contribution of proposed research work to add new /additional knowledge
 - Tentative Plan of Work
 - References
- c. Guidelines for Presentation
 - Title slide should contain proposed research topic, name of candidate
 - Second slide should give outline of the presentation
 - Subsequent slides should describe the various aspect/ topics of the research proposal in proper sequence as described above.
 - Reference should be given on relevant slide as a footnote.
 - Slide should not have too much text. Avoid reading from your slides. Remember these
 slides are to remind you of the main points that you wish to present. Try and explain
 your point to the panel in your own words and not by directly reading every word on
 the slide.

- 5) Candidates have to mandatorily submit all the documents whichever applicable (as per Annexure-VI) along with the print out of the Application form duly signed by them and a copy of the Bank Challan receipt, at the time of Admission failing which their candidature shall be automatically cancelled forthwith.
 - a) Documentary proof in support of previous & current experience (if applicable) and academic qualifications should be attached, failing which it will be believed that the candidate does not possess the requisite experience and qualifications mentioned therein and the candidature will be summarily rejected.
 - b) Candidates claiming exemption from the entrance test should enclose requisite documents failing which, their claim for exemption will not be considered.
 - c) Candidates claiming category relaxation must enclose requisite certificates, failing which their relaxation will not be considered.
 - d) Physically disabled candidates, having not less than 40% of physical disability should enclose certificate of disability issued and duly signed by the competent medical authority. (as per the format prescribed by the Government of Gujarat)
 - e) Candidates having obtained their qualifications from abroad or under foreign system in India are required to obtain an equivalence certificate from Association of Indian Universities (AIU) to be submitted along with an application form.
 - f) Candidates already in service must submit "NO OBJECTION CERTIFICATE" from his or her current employer on the letterhead of organization, duly signed by the appropriate authority of the employer organization clearly stating the following:
 - (i) The candidate is permitted to pursue studies on a Part-Time basis
 - (ii) That his/her official duties permit him/her to devote sufficient time for research.
 - (iii) He/She will be fully relieved from duty as and when required by the University.
 - g) Candidates applying for Full-time sponsored category shall submit an additional 'Certificate' on the letterhead of organization, duly signed by the appropriate authority of the employer organization clearly stating the following:
 - (i) For the period of his/her studies in the Programme, the candidate would be treated as on duty with usual salary and allowances, and
 - (ii) That he/she will be fully relieved and granted study leave for a minimum period of 3 years at the time of admission.
 - h) Candidates shall also submit endorsed documents that the laboratory/experimental facility is available at their proposed place of work or if they plan to do experiment in any other University/institute etc. then the candidate must produce a "No Objection Certificate" (NOC) from the respective HOD/Director of the University/Institute etc.
 - i) Candidates having obtained the degree through the medium of MOOCs shall submit a Certificate from the Parent Institution/University stating equivalent credit weightage; being assigned to the candidate for the credits earned in the MOOCs opted by him/her through SWAYAM platform in the credit plan of the programme offered by the Parent Institution/University;(Wherein it should be categorically specified that MOOCs opted by any student has been allowed only for 20% of the total courses offered in a particular program in a semester by the Parent Institution/University).
- 6. No TA/DA shall be provided by the University for appearing for Research Proposal Presentation.

List of requisite enclosures (self- attested documents to be submitted along with the application form)

- 1) School Leaving Certificate
- 2) Graduation Marksheet(s) / Degree Certificate
- 3) Post Graduation Marksheet(s) / Degree Certificate (In case of CGPA/CGPI, the candidate is required to submit the attested copy of the conversion formula to convert it into equivalent percentage)
- 4) CA/CMA/CS Certificate (If Applicable)
- 5) Caste Certificate (If Applicable)
- 6) Valid Non Creamy Layer Certificate for SEBC (If Applicable)
- 7) Certificate of Physical Disability (If Applicable)
- 8) No Objection Certificate on the letterhead of the current employer organization stating mentioned conditions (in Original)
- 9) A Certificate on the letterhead of the current employer organization stating availability of study leave and other conditions, etc. (Applicable to Full-Time Sponsored Research Scholars)
- 10) Equivalence Certificate from Association of Indian Universities (If Applicable)
- 11) Candidates shall also submit endorsed documents that the laboratory/experimental facility is available at their proposed place of work or if they plan to do experiment in any other University/institute etc. then the candidate must produce a "No Objection Certificate" (NOC) from the respective HOD/Director of the University/Institute etc.
- 12) UGC-NET/UGC-CSIR NET/JRF/SLET/GATE/GPAT Certificate (If Applicable)
- 13) M.Phil Certificate and Marksheet(s) (if applicable)
- 14) Teacher fellowship holder Certificate etc. (If Applicable)
- 15) A Certificate from the Parent Institution/University stating equivalent credit weightage has been assigned to the students for the credits earned in the MOOCs opted by him/her through SWAYAM platform in the credit plan of the programme offered by the Parent Institution/University; wherein it should be categorically specified that MOOCs opted by any student has been allowed only for 20% of the total courses offered in a particular program in a semester by the Parent Institution/University
- 16) Bank Challan receipt (hard) copy of Fee payment
- 17) Proof of Local Residential Address
- 18) Migration Certificate (in Original)
- 19) 3 Recommendation Letters from eminent persons not below the rank of a Professor in proposed research field (required for GTU Faculty having not less than 15 years of Full-Time teaching experience)

Note:

- In case of CGPA/CGPI, the candidate is required to submit the attested copy of the conversion formula to convert it into equivalent percentage
- In case, the validity period of Non-creamy layer certificate is due for expiry, the candidate will
 have to produce a certificate with renewed validity at the time of producing requisite documents
- Sr. No. 15, mentioned above is only applicable to candidates having cleared their relevant Master's Degree with the inclusion of online learning courses through SWAYAM platform for 20% of the total courses offered in a particular program in a Semester