

Think Ph.D. Join JJTU

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# Shri Jagdishprasad Jhabarmal Tibrewala University

(UGC Recognised University)

Estd. : As per UGC Act, 1956 Vide Act No. F2(5)Vidhi/2/2009 of 05.02.2009, Govt. of Rajasthan



**Ph.D. GUIDELINES**

*Think Ph.D.*

*Join JJTU*



एक कदम स्वच्छता की ओर

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### ABOUT JJT UNIVERSITY

**Vision :**

To Provide Value Based Quality Higher Education & Research for Self Reliance.

**Mission :**

Transformation of society by establishing quality based educational Institutions with a strong base in Indian values for sustainable exploitation of natural resources through development of human resources.

To provide advance knowledge and educate scholars including the underprivileged in science, technology and other areas that will best serve the nation and mankind in the 21st century. Thus we believe will enable us to build up a society on equality and democratic values.

**Location :**

The University is situated at Vidyanagari, Chudela, Jhunjhunu- Churu Road, Dist, Jhunjhunu, Rajasthan 333001 and can be easily reached by rail, road, and air. It is 200 K.M. from Jaipur, 250 K.M. from Delhi, 60 K.M. from BITS Pilani, and 35 K.M. Churu.

**WHY SHRI JAGDISHPRADAD JHABARMAL TIBREWALA UNIVERSITY FOR PURSUING Ph.D.?**

1. The University follows all rules, regulations as laid by the regulating bodies for research work.
2. The University has built a well organized infrastructure for research program.
3. The University's founder members and trustees are a group of experienced industrialists so that andscholars are getting the practical and applied research facilities in the various industrial laboratories.
4. The University provides online facilities for the scholar through proper guidelines for research from primary stage to the end of research work.(is it required to be included)
5. University organizes various workshops/ seminars/ symposia/ conferences/ Faculty development programs periodically for Scholars to understand the research subject.
6. The University is being associated with various research laboratories of Govt./Semi – Govt. and industries in various disciplines & various Libraries and E – resources.
7. The University is being associated with number of professionals.
8. The University has more than 5000 recognized Guides/ Research Supervisor having vast experience with specialization in different disciplines, many industrial experts as Co-Research Supervisors / Co- guides, Emeritus Professors, Adjunct Professors and experienced Advisors from reputed institutes.

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9. The University is situated in rural area of Jhunjhunu of Rajasthan and the Trust which runs the University is situated in Mumbai having affiliated colleges with University of Mumbai, Garware Institute of career studies, and many more.
10. The Chancellor/ Chairman of the University is a well qualified Engineer, Lawyer, an Industrialist, Social Activist, Writer, Ex – Member of Senate of Mumbai University having vast exposure and wide connections with Academia, Industries and has personally witnessed the working of Oxford, Cambridge, California, Columbia and various other leading Universities of India and abroad.
11. The University has excellent facilities and infrastructure for studying at Jhunjhunu which is very close to most famous institute – BITS Pilani.
12. A) The University has got inter-phasing with industry organization like FICCI, COSIA etc., and have got their highly intellect resources to guide our scholars as co – guides.  
B) The University is planning to setup research lab jointly with COSIA in various field like solarenergy, Wind energy etc.
13. The University is student-friendly and provides proper guidance to the students right from Research Proposal to Synopsis, final dissertation and ensure scholar to complete best research work, additional knowledge, well within the time frame.
14. The University has its own publications house in which many publication divisions to publish books & journals of ISSN/ISBN numbering different areas of research.
15. The University is an listing displaying various National/ International seminars on its website for the Participation & Presentation of papers though conference by the scholars.

### **SALIENT FEATURES :**

- 1. Infrastructure :** The University campus is spread across 30 acres of land with approximately 5.6 Lakhs sq. ft. built up area and having modern infrastructural within the campus.
- 2. Faculty :** The University is equipped with qualified and experienced faculties. Besides, several experienced visiting faculties are invited to deliver lectures for the benefit of students. At present, there are more than 5000 Research guides in various subjects. The University has also appointed good number of Adjunct Faculties/Emeritus Professors in different subjects.
- 3. Library :** A Central Library spanning over more than 6000 sq. ft. area and having over 32000 books under different titles, Number of Journals (400), Magazines and Periodicals (30) for the students. University is members of various E-Libraries where students can access various journals from their home. SOUL-software is installed to access library books.

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### 4. Computer Lab :

The University is equipped with state-of-art Computer laboratories with Wi-Fi facilities. The Labs are having Latest computers, with LCD Projector, Scanner, and the following software's with license.

- 1) Window 7 with Microsoft 2010- Office, Excel Power Point/ Linux System etc.
- 2) SPSS for definition, Objectives and features, Data analysis, Data entry creating variables, Switching to data labels, Frequencies, recording into different variables, cross tabulations and layers.
- 3) Solid work software covering Drawing Editors, 3D CAD covering part/ solid/ surface assembly/ Drawing and detailing/ sheet metal/ photo- works modelling.
- 4) COSMOS advance professional.
- 5) COSMOS Motion covers mechanism with Analysis.
- 6) Auto CAD.
- 7) 3D Printer.

### 5. Accommodation :

The following facilities have been developed :

- . Separate furnished hostel facilities for girls and boys.
- . Necessary furniture and other items for their comfortable stay.
- . Common room for general activities like cable TV and indoor games in hostel.
- . Ironing, phone, cafeteria and library facilities.
- . Air cooled rooms and round the clock supply of water& light.
- . Wi-Fi campus.
- . Departmental stores for stationeries, spiral binding, photocopying and daily routine goods and essential materials, printing & hard binding of Thesis etc, are available at cost.

### 6. Transport Facilities :

Transport facility is available on paid busses from University Campus to Jhunjhunu, Jaipur and Delhi City for Research Scholars if informed in advance to MahavirJi – 9928038675, 8104883381.

### 7. Banking Facilities :

ATM is installed within the campus.

### 8. Canteen :

(a) The University has a spacious and well furnished canteen & serves all vegetarian dishes to the students / scholars residing in the hostel.

(b) Provisional Store and stationary facility is available in University campus.

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- 9. Sports Complex and Gymnasium :** A modern sports complex providing facilities for both indoor and outdoor games, cricket ground, volley- ball court, basket- ball court, foot- ball & hockey ground, Table Tennis, Lawn Tennis, Carom, Chess etc. A modern well- equipped gymnasium is developed with various equipments, Tread mill, Ergo meter, Multistation Gym, Weighing Machine, Bench Press, barbell, Dumbles, Rubber mattresses etc.
- 10. Music Room :** Tabla, Harmonium, Flute, Guitar, Tanpura, Organ, Kango, JhangeDhapli etc. & other musical instruments are available.
- 11. Photographic Lab :** The University has fully Equipped Photographic lab with (1) Dark - Room (2) Digital camera with flash, Digital Lights, Photo Enlarger, and Computer with Photoshop software.
- 12. Physiotherapy, Yoga and Naturopathy Centre :** The University has fully Equipped Physiotherapy, Yoga and Naturopathy Centre with trained and experience Doctors and trainers.
- 13. Health Club :** (a) Our philosophy at JJTU is that exercise and activity are essential to a healthy, balanced lifestyle. We have our dedicated team of fitness professionals is to help you get started, develop and achieve your goals in the Campus. The centre is equipped with state-of-art machines. (b) Medical Hospital facility is available in University campus for 24 hours, including diagnosis delicious centre, dental, eye and general physician. Also homeopathy and Ayurveda doctors available.
- 14. Site Visit on Request :** The JJTU Campus is surrounded with the monuments and Heritage. The places are :
- . Mandava Heritage
  - . Pilani Auditorium
  - . CEERI, Pilani
  - . Rani Sati temple
  - . Khami Sati temple, Jhunjhunu,
  - . Shiva Temple, Bissau

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### RULES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D.)

The JJTU University offers Research programme in different subjects & in inter-disciplinary areas leading to the Degree of Doctor of Philosophy. A candidate shall ordinarily work in a recognized place of research including the University Departments and Research Institutes recognized by the University under the supervision of a Research faculty supervisor of the University. The rules regarding eligibility, registration, supervision, submission and evaluation of thesis, viva voce and defence of thesis shall be as follows:

#### Eligibility :

1. For admission to the Ph.D. programme in a subject in any faculty, applicants fulfilling the following criteria shall be treated as eligible:

a.1: Candidate having passed Post Graduate Degree Examinations with at least 55% marks or having grade equivalent there to awarded by the recognised concerned University.

OR

The cases of persons having less than 55% marks at Post-Graduate Degree Examinations shall be referred to BASR for consideration.

The registration of such persons shall be confirmed on the recommendations of the BASR.

OR

a. 2 A candidate who has obtained any Master's Degree with a minimum of 55% (50% for OBC (non-creamy layer)/ SC/ ST/Physically challenged candidates) marks in aggregate or equivalent grade is eligible to register for the Ph.D. Programme.

a. 3 The teachers employed in University /Affiliated Colleges before 31.03.1992 and are continuing in service on a regular basis and desirous of registering for the Ph.D. Programme shall be permitted for registration, if they have a minimum of 50% marks at the Master's Degree course.

a. 4 The candidate shall work for Ph.D. degree in a subject studied at the Master's Degree or related subject under a faculty supervisor. However he/she may be permitted with the approval of the concerned Board of Studies, to conduct research in a subject other than the one chosen for the Master's Degree, provided it is of an interdisciplinary nature.

a. 5 If the research topic is of interdisciplinary nature, the candidate with the consent of his faculty supervisor may opt for a Joint supervisor who shall also be the recognized faculty supervisor of the University. However, the main responsibility of supervising the research work shall vest with the

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faculty supervisor and the candidate shall finalize and submit the thesis through the faculty supervisor.

b: Persons working in National Laboratories-Institutes/ Government / Private organization should be nominated / sponsored by the respective employer. These persons should be holding rank of the Director/ or above.

OR

c: In professional faculties like Ayurveda, Medicine, Law, Homeopathy etc. persons having Graduate Degree and having 10 years professional experience are eligible.

2. The fellow members of the Institute of Chartered Accountants and/or Institute of Cost and Works Accountants shall be held eligible for registration for Ph.D. in the subject of Accountancy and Actuarial Science in the Faculty of Commerce provided they possess a Bachelor's Degree of any statutory University and have 10 years experience in the relevant field.

3. A Graduate in Engineering who has developed important new techniques [new for the country] or designed and fabricated special instruments or apparatus which are deemed by competent judges to be of valuable contribution to engineering may be permitted by the BASR in Engineering on the recommendation of the appropriate Board or Boards of Studies to submit the thesis for the Ph.D. Degree in that Faculty. Such a candidate must have at least 10 years' standing as a Bachelor of Engineering.

Above-mentioned rules will be also applicable to the foreign students who have obtained the Master's Degree from the statutory Indian Universities/Recognised Foreign Universities.

4. Application for research in inter-disciplinary areas and from applicants belonging to a faculty or subject other than the faculty or subject in which the research is proposed to be done and from the international students [those who have not obtained the degree from Indian Universities] shall be considered on the basis of the proven ability and aptitude of the researcher for such kind of research. Such proposal shall be examined by the Guide and the Head, Place of Research before giving provisional admission. The admission will be confirmed after the DRC concerned approves the topic.

5. Those who are above 60 years may be enrolled on the basis of Graduation degree. If they provide undertaking that the Doctoral Degree is not used for Govt. job.

6. Exceptional ability - Extra ordinary performance achievement National Award Winners in any stream can also be considered for enrollment as Research Scholar.

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7. Hon. Chancellor/Chairperson may waive the eligibility criteria of minimum 55% mark in Post Graduate degree if the Candidate has exceptional abilities in research, vast industrial/educational experience or having credit of more publications in refereed journals etc. however the Scholar to give undertaking that he will not seek any Government job.
8. Candidate has to discuss the area of Research interest with Research Coordinator at the time of Entrance Test.

### **STANDARD PROCEDURE FOR PURSUING Ph.D.**

(As per UGC Norms, July 2016)

1. Fill the application form, affix the Photo wherever asked, attach documents and submit the same duly filled and signed along with registration fee of Rs. 2000/- in the shape of demand draft drawn in favor of Shri JJT University. Demand Draft may be made payable at Mumbai if the candidate visits Mumbai at Shri Rajasthani Seva Sangh, J.B. Nagar, Andheri East, Mumbai – 400 059 or at Jhunjhunu if the Candidate visits University Campus.
2. Appear for Ph.D Entrance Test (CET) then Appear for interview after submitting interview form (Annexure – A).
3. Research Proposal of approx. 4-5 pages be prepared detailing about what is the reason for selecting the topic, what is the benefit of that topic, what are the planning to do the research and also what is discussed during interview.
4. After passing the Interview, pay the term fees of 1st year minimum instalment of Rs. 30,000/- or Rs. 60,000/-
5. Collect your Ph.D. Identity Card indicating your Name, Registration number.
6. In normal circumstances, the supervisor will not be changed. However, in exceptional cases with valid reasons, the supervisor can be changed on the written request of Research scholar to the Vice-Chancellor.
7. The minimum three years period will be counted from the date of Pre- Ph.D. Entrance Test and successful interview.
8. After Completion of Course work and deposition of complete three year fees ie. Rs. 180000/-, Course work & Evaluation charges Rs. 25000/-, Course work Exam will be conducted and DRC will be done.
9. Engineering, Pharmacy, Technical and Science scholars should manage laboratories related to their research work either at their college or in a private lab at their own cost, if practical work is carried outside university campus. For private labs NABL certification must be provided along with list of lab equipments & consent of working in the Lab.
10. Prior approval of the Laboratory should be taken from University before starting the Research work. The lab should be fully equipped to carry out all experiments to pursue Research programme. The list of equipments & qualified guide for lab should be furnished before DRC.
11. Research Scholar has to do one semester course work that includes Class room learning, Research Methodology, Computer Application, Quantitative technique, Review of Literature and Assignments



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at University campus. The course work detail is as per annexure - B. The books for above courses are available in University library on payment.

12. After passing the course work exam, the scholar will be allowed to proceed with 20- 24 pages of Synopsis work and complete the assignment given before submission of synopsis with due presentation during DRC. At the time of DRC or before, the Scholar is expected to submit the Original Migration Certificate after filling the Enrollment form and acknowledgement will be issued. This will qualify the Research scholar to pursue further Ph.D. programme.

Once the Departmental Research Committee (DRC) approves the Synopsis, a permanent registration letter will be issued to the Scholar. Those who have received the permanent registration letter, they are the confirmed Research Scholar. University will forward the Synopsis to INFLIBNET to be uploaded in Shodhgangothri.

13. Research Scholar has to pay Rs. 25000/-at the time of course work that includes boarding, lodging and examination and evaluation fee. However, those who prefer to stay in an air-conditioned room will have to pay an addition charges of Rs. 500/- per day on a sharing basis.
14. Successful completion of DRC, Research Scholar is expected to publish two Articles in an ISSN numbers referred journal on the topic chosen, participate two National and two International conferences held anywhere, and take guidance with Supervisor for a period of 600 hours. Research Scholars to submit a photocopy of the article published with certificate from the publisher that it has been referred, to the University at the time of Thesis submission.
15. Once the Research findings are completed, Research Scholar must submit anacceptable quality of Summary of Thesis containing 15-25 pages as per format, with in 24 months from the date of admission. In case the Research Scholar is not able to follow this instruction, then it will be presumed that scholar is not interested in completing his/ her Ph.D. in the minimum three years. In that event, additional fee of Rs. 60000/- per year for successive years has to be paid. The registration is valid for a maximum period of six years.
16. Six monthly progress reports to be sent to the University duly signed by the Supervisor stating in detail the number of working hours undertaken.
17. Research scholar is expected to spend minimum 600 hours with the supervisor for any of his work and discussions during the tenure of Ph.D. course and a certificate to that effect be obtained from the supervisor and to be submitted to the University before submission of the thesis.

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18. The Scholar must attend 2 National Seminars and 2 International Seminars, Presenting papers in the seminars, and six monthly program report duly signed by the Supervisor at regular intervals of six months.
19. After submission of Summary of Thesis, Research Scholar must prepare the Thesis according to Annexure –D and submit a soft copy of the Thesis complete in all respects within two months from the date of submission of Summary of Thesis for plagiarism check. The University expects the Scholar to do an original research. However, the University will allow a maximum of 15% plagiarized work that includes 1st page of title page to last page (including references).
20. Prior to submission of thesis, Research scholar shall make a Pre Ph.D. presentation submission in the department that may be open to all faculty members and Research Scholars for getting feedback and comments which may be suitably incorporated in the draft of Thesis under the advice of Supervisor/Co-supervisor. At the time of Pre-Ph.D. presentation, Research Scholar is expected to submit all pending documents as mentioned in the check list.
21. The Ph.D. supervisor will provide a panel of eight subject Experts selected from not below the rank of Associate Professors working in University/College level for sending the Thesis for evaluation. University will select two Professors for sending the Thesis evaluation. Research Scholar must provide affidavit Rs. 100/- Non-Judicial stamp Paper as per Appendix-3.
22. Final thesis should be hard- bounding Blue, Red or Black colour and to be printed as per the format shown in annexure D. Five sets of hard bound copies of Thesis and three soft copies of the thesis are to be submitted to the University. The soft copies should be submitted in Ms-Word and PDF forms (Single file and Chapter wise). Hard copy or soft copy should match page wise.
23. On receipt of satisfactory evaluation report, the research scholar will be called to appear for Viva-Voce where he has to make the presentation of Thesis and shall be openly defended by Research scholar in presence of Director (Research), HOD, Faculty of Department, Supervisor/Co-Supervisor and a Vice-Chancellor's nominee.
24. The Ph.D. Degree will be awarded as per concerned Department.
25. If the UGC and/ or any other authority do not give any benefit in terms of monetary or otherwise to Research scholar after taking Ph.D. The University shall not be responsible for any reason whatsoever.
26. All research papers published in the referred journal and Thesis approved & Accepted by the University will be the sole property of the University.
27. If at any time during the course, Ph.D. scholar wants to discontinue, then Shri JJT University will not issue any certificate regarding any course done during the tenure from the University and no fee will be refunded or transferred.

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28. Scholar is advised to submit Research Proposal, Synopsis, Summary of Thesis and Thesis as per the format given in Ph.D. guidelines. While submitting Synopsis, summary of Thesis and final Thesis in University, a letter should be enclosed signed by the Supervisor that it is in the prescribed format.
29. No complaint will be entertained from the Research Scholar for late submission of synopsis/summary of the Thesis/Thesis in the University. If the concerned Co-ordinator do not give permission for the submission, then Research Scholar may feel free to contact the higher authorities. Registrar, Director, Vice-chancellor, Chancellor.
30. The Pre-Thesis should be submitted in spiral binding and after necessary correction it should be submitted in hard bound.
31. Certificate from the Editor / Publisher should be obtained stating that same article has been published by the scholar as Shri JJT University in our journal (volume/ref).
32. It is mandatory to mention that you are Research Scholar of Shri JJT University in any article / paper presentation / conference certificate.
33. The publication should be done in recognized and refereed journal having ISSN No. The article should be original and scholars should submit a copy of plagiarism check result along with reprint of the journal. The article should not exceed 15% a plagiarised matter. In case the scholar did not comply. The University will do it at scholar's cost.
34. The publication should preferably be in Single Authors or with Guide publication having more than two author will be not considered.
35. It is mandatory to submit hard copy of Journal and souvenir in which paper published / seminar / workshop attended.
36. The scholars are requested to donate the Journals / Books and other useful material to the University for the reference of scholars.

**ANNEXURE – A**

**CONTENTS OF RESEARCH PROPOSAL FOR INTERVIEW (4/5 PAGES)CHAPTERTOPICSPAGE**

Chapter	Topics	Page
1.	PREAMBLE	0.50
2.	OBJECTIVES	0.50
3.	HYPOTHESIS	1.00
4.	METHODOLOGY	1.00
5.	SCOPE & LIMITATIONS	0.50
6.	UTILITY	0.50
7.	REFERENCES	0.50

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Annexure 'B'

**COURSE WORK**

- |    |                                   |              |
|----|-----------------------------------|--------------|
| 1. | Research Methodology              | - 100 Mark ] |
| 2. | Computer application              | - 100 Mark ] |
| 3. | Quantitative Techniques           | - 100 Mark ] |
| 4. | Review of Published Research work | - 100 Mark ] |
| 5. | Assignments, PPT & Class Lectures | - 100 Mark ] |

Minimum qualifying Mark 50% of the Aggregate Marks.

Research scholar is expected to prepare the following assignments :

1. Assignment I - Critical Review of Literature – Minimum 10 Articles (not more than three from one article) from referred journals with ISSN Number on the topic of his/her research work.
2. Assignment II - Critical Review of Literature Minimum 5 Patents/ Journals/ Books with ISBN Number.
3. Assignment III – Assignment of Research Methodology, Computer Application and Quantitative Technique on given topic.

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### COURSE CONTENTS OF RESEARCH METHODOLOGY

**Module I : Introduction to Research** : Definition, Scope, Limitations, and types, objectives of Research, Research Process.

**Module II : Sampling Designs techniques** : Concepts, Types and Techniques, Sample Size decision Data, Collection, Secondary and primary Data, method & Techniques, Designing questionnaire, Data Preparation: Tabulation, Coding, Editing.

**Module III : Scaling techniques** : Concept, types of Scales, rating Scales & ranking scales construction techniques, multi dimensional scaling.

**Module IV : Attitude measurement & observation** : and report preparation motivational research, observation type and layout of research report, precautions in preparing the research report, bibliography and Annexure in report, drawing conclusions, giving suggestions and recommendations to the concerned persons.

**Module V** : Types, steps of report writing, precautions in report writing.

#### Suggested Readings :

1. Research Methodology - JJTU Publication
2. Research Methods for Business scholars : Saunders Lewis, Thorn Hill, and Pearson Education, 2009
3. Research Methodology Methods and Techniques : C.R.Kothari, New Age International Publishers, 2012
4. Business Research – Cooper 7 Schindler, Tat McGraw Hill – 2006
5. Marketing Research – Beri, Tata McGraw Hill, 1993, 2nd edition
6. Optimization techniques in Engineering, PHI, 2001
7. Design of techniques for Science and engineering, springer, 2008
8. Experimental Designs in Behavioral Research – 1989 – K.Broota – New Age Int. Publisher
9. Methods in Social Research – Goode & Hatt – 2006 surjeet publications
10. Foundations of behavioral Research – Fred Kerlinger 2009 – Surjeet Publications

**COURSE CONTENTS OF QUANTITATIVE TECHNIQUES**

**Module I** – Application of Central tendency

(Application of central tendency and central dispersion, Co-efficient of correlation, coefficient of determination and non – determination, calculation of standard of estimate.)

**Module II** – Forecasting techniques

Multiple correlations and multiple regression, Time series analysis

**Module III** – Parametric Test

**Theory of estimation** : Point and interval testing of Hypothesis Large and Small sample Tests; parametric Test : t- test, F Test, Chi- square test, ANNOVA, Probability distribution, Binominal, Poison and Normal Distribution.

**Suggested Readings :**

1. Mathematical Statistics – Gupta & Kapoor – Sulthanchand & Sons, New Delhi, 2005
2. Research Methodology – JJTU Publication
3. Kothari CR – Quantitative Techniques ( Vikas Publishing New Delhi), 2002
4. Kapoor V.K.- Operations Research (Sultanchand & sons New Delhi), 2006
5. Khandelwal & M.Gupta – Quantitative Techniques (Tata MC Grow – hill publishing Co. Ltd. New Delhi), 2004
6. Agarwal N.P. – Quantitative Techniques, Dhanpat Rai Pub. New Delhi, 2000
7. D. M. Mithani – Quantitative Techniques, S. K. Katarik Pub, 2006

**COMPUTER APPLICATION**

**Module I : Introduction :**

Classification of computers, computer memory, Types of software's: Application and system software's, operating systems and types, single user, multi user, multi tasking and single tasking, **Application of computers for business and research.**

**Module II : Data Communication and Networks :**

Data Communication Concepts, Local area network, internet, intranet, Extranet, Web e- mails, search engine- enterprise: E- Communication and E- Collaboration.

**Module III : MS Office and its application :**

File handling in window, various of MS office, Ms word: Test formatting, Mail merge, Macro, MS Excel: Features, Various Formulas And M.S Power Point: Creating Presentation and effects.

**Module IV : SPSS**

**Introduction to SPSS :** Definition, Objective and features, Data analysis using SPSS: Data entry, creating variables, switching to data analysis: Frequencies, Recording into different variables, cross tabulations and layers.

**Suggested Readings :**

1. Computer Fundamentals -V. Rajaraman, PHI.2006
2. Computer Fundamentals -Sinha and Sinha, BPB Publications, 2009
3. Introduction to Computers -Norton, TATA McGraw Hill, 2006
4. Computer fundamental and Introduction to IBM PC -Dr.Pankaj Nagar Manish Soni, Ramesh Book Deport, 2008
5. An introduction to data base system -Desai, Galgotia Publication, 2002
6. Computer Network -Tanebaum, Person,2004
6. An introduction to Database System -Date/ Kannan/ Swamynathan, Person, 2006
7. Fundamentals of Computers -V.Rajaraman, Prentice Hall,
8. SPSS an Introduction and Implementations, -JJTU Publication.

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### Review of Published Research Work

#### Recommendations

- I. Patent (US,British,Indian)
- II. Use of Internet, sights (DOAJ) etc.
- III. Use of Research Journals/ E–Journals (Springer, Wiley, Elsevier Academic)
- IV. Use of e – Library, Pro quest, ebsco etc.
- V. Use of various Libraries like Central Library, British Council, American Library & JJT University Library
- VI. Use of EBSCO\_HOST online Database for Academic Libraries.
- VII. Refer links of various e-journals given in JJTU website.
- VIII. Emeralds

For any doubt scholar may contact Dr. S.K.Yadav – 09810888853

Email Id - drskyadav@hotmail.com



**DRAFTING A GOOD RESEARCH REPORT (THESIS)**

1. Please take care that :-
  - (i) The title has a clear focus
  - (ii) Problem is clearly stated and suitably delimited
  - (iii) Population is properly defined and sampling is scientific
  - (iv) It covers conceptual framework and review of related literature
  - (v) Facts are critically evaluated and objectivity is strictly followed
  - (vi) Finishing, Polishing and final touches are given to make the report weighty, authoritative, convincing and attractive.
2. Language should be clear, lucid, concise, precise, correct, complete, readable and effective. Use simple words, familiar words, short sentences (not complicated and long-winding) and less technical jargon.
3. Use proper typography, correct grammar, punctuations and spellings, appropriate headings, sub-headings, foot notes etc.
4. Let the layout be attractive and uncluttered.
5. There should be logical flow and integrated progression of ideas.
6. Avoid irrelevant material, redundant repetition and contradiction.
7. Display good grasp of the subject.
8. Analysis and interpretation of data should be proper and valid and duly supported by charts, tables, figures, diagrams etc.
9. Appropriate statistical tools/measures should be used.
10. Cover all issues/objectives and hypothesis evaluation/testing.
11. Findings should be appropriate.
12. Conclusions drawn should be sound and balanced.
13. Remedial measures/suggestions should be rational and feasible/practical.
14. Recommendations should be valid.
15. Due care should be taken regarding technicalities of thesis writing.
16. Ensure correct proof reading and crisp editing.
17. The thesis is a scholarly document. It should make an original contribution and offer stimulating ideas.

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#### Details of Ph.D. fee Structure for enrollment three year Ph.D. Programme after July 2016 (which is not re-fundable)

S.No.	Details of Fees	Amount
1.	Registration fees	2000/-
2.	Pre entrance Test Examination Fee	30000/-
3.	Tuition Fees for Three years	180000/-
4.	Hostel charges for entire Course Work	15000/-
5.	Enrolment Fees	500/-
6.	Examination and evaluation charges for course work	10000/-
7.	Thesis Evaluation Fees	60000/-
8.	Plagiarism fees ( Free for first time)	2000/- per successive evaluation
9.	In Thesis if words/sentences/paragraph is repeated multiple times then it is chargeable.	2000/- per checking
10.	Migration certificate	500/-
11.	Provisional degree certificate	500/-
12.	Convocation charges	5000/-
13.	Degree by post	6000/-
14.	Charges for Hostel	500/- per person (In Sharing)
15.	Charges for A/C room	1000/- per person (In Sharing)
16.	Medical Check-up Charges	1200/-
17.	Late fee and other charges	As prescribed in Ordinance from time to time.
18.	Research Methodology, Quantitative Technique & Computer Application books Set	900/-

**Note :-**

1. Fees once paid will not be refundable/ or Transferable.
2. No complaints will be entertained if the scholar is required to pay additional fees Rs. 60000/- after 3 years, for any reasons such as allocation of guides, evaluation of Thesis, correction of thesis, Evaluation of summary, declaration of results of course work etc.
3. Soft copy of thesis for Plagiarism checking can be sent to thesis@jjtu.ac.in immediately upon sending the summary within the 24th month.
4. Those who do not submit the plagiarism cleared thesis which is permitted up to 15% with Minimum 250 pages of thesis as per chapter scheme as indicated in the guide lines, charges will be payable for the subsequent years and year will be counted till the date of Viva-voce Examination is successfully completed.
5. Fees paid at the time of Pre entrance test (CET) of Rs.30000/- will be adjusted in the

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6. Scholars are advised to submit migration certificate. N.O.C from Accredited Laboratories (wherever applicable).
7. Scholar should take care of Thesis as prescribed in Annexure-D i.e, spacing between lines, margin, fonts, word size, pages, cauterization etc. Any repetition of paras or irrelevant tables/formulas no relevance to the context will not be accepted.
8. The sketch, Diagram, images, tables in the subject of Science, Pharmacy, and Engineering etc. shouldnot exceed 20% of the total pages.
9. In case of sketch, Diagram, images, tables necessitated in the Thesis, the pages should be minimum 230 excluding the graph, images, tables etc. without which Thesis will not be considered for Plagiarism check.
10. Co-supervisor as external guide will be provided to the scholar in case of inter-disciplinary Research and unavailability of expert faculty as per Regulation July 2016.
11. At the time of DRC Scholar must pay two years fees with course work fees. The balance third year fees should be pad before pre-thesis presentation.
12. There is no upper limit for the pages in thesis.

Note: - Scholar may deposit their fees though NEFT the Bank details as under:

Account Name: Shri JJT University

Account Number: - 44710200001215

IFSC Code: - BARB0 (Zero) BRGBXX

Bank Name: - Baroda Rajasthan Kshetriya Gramin Bank (sponsored by Bank of Baroda)

Branch : Ajmer

For confirmation of fees receipt contact: - 9667979327, 8104883372

Email ID: - accounts@jjtu.ac.in

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**CHECK LIST TO BE EXECUTED AT THE TIME OF SUBMITTING THE THESIS IN UNIVERSITY**

1.	Name of Scholar	
2.	Subject	
3.	Registration No.	
4.	Enrolment Number	PEN/
5.	Fees paid so far	
6.	Whether Scholar has exceeded the specified period of two years and third year fee is paid (if applicable)	Yes/No
7.	Whether the Scholar has submitted application along all the documents from Matrix to post graduation including Mark-sheet are attested or Original certificate seen and certified by University authorities	Yes/No
8.	Whether interview letter is signed by the scholar	Yes/No, if yes write the date
9.	Whether lab letter is furnished (wherever applicable)	Yes/No
10.	Whether guide Consent letter is submitted	Yes/No
11.	Whether six monthly progress report submitted with Guide seal and signature	Yes/No
12.	Whether Scholar has submitted the Yellow book (600 Hours Record) as per the guidelines	Yes/No
13.	Whether PPT soft/hard copy submitted	Yes/No
14.	Whether Review of Literature completed	Yes/No
15.	Whether course works have been successfully completed or exempted from course work. (Attached CW marks details)	Yes/No
16.	Whether Synopsis is submitted 3hard and 2 soft copy	Yes/No
17.	Whether topic is searched in Google/inflibnet to check whether any one else is doing Research on same topic	Yes/No
18.	DRC form with DRC approval Letter is done	Yes/No
19.	Whether Migration certificate in original is submitted for Enrolment	Yes/No

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20.	Whether Four conference participation certificate (two national and two international) are submitted either with presentation or without presentation	Yes/No
21.	Whether reprint for Two Articles published in refereed journal is submitted with editor's confirmation that it is a refereed articles	Yes/No
22.	Thesis Summary 3 hard and two soft copy with panel of referees	Yes/No
23.	Whether the Thesis has been checked with plagiarism software and what is the percentage of copy paste found. Please attach the result sheet	
24.	Whether Scholar has submitted the Affidavit as per Ph.D. guidelines	Yes/No
25.	Whether Guide has submitted the undertaking as per Ph.D. Guidelines	Yes/No
26.	Whether the scholar has made pre-presentation of Thesis	Yes/No
27.	Whether No dues letter has been circulated, signed by all concerned and returned to Ph.D. section. No dues certificate should not be issued to Scholar.	Yes/No
28.	Whether 5 hardbound as per the colour specified for Thesis is submitted as per Ph.D. guidelines with two soft copy	Yes/No
29.	Whether covering letter confirming submission of affidavit, undertaking, and other attachment if any is submitted	Yes/No
30.	Whether Thesis contains required pages of Text plus graph/images relevant to the context and proper illustration	Yes/No

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Annexure 'A'  
INTERVIEW

(At the time of interview, Research Scholar is expected to submit a Proposal of 4 to 5 pages covering all the points mentioned below)

1. Name : \_\_\_\_\_
2. Address: \_\_\_\_\_
3. Contact No: \_\_\_\_\_
4. E-mail Id: \_\_\_\_\_
5. Topic of Research : \_\_\_\_\_
6. In case of faculty of science/ engineering/ pharmacy, name the institution where research experiments/ practicals will be carried out.  
\_\_\_\_\_
7. Is your research project sponsored by the organization you work with? Yes/ No. If Yes, Please state the nature of sponsorship.  
\_\_\_\_\_
8. Are you a fellow member of ICA (Institute of Chartered Accountants) or an engineering graduate seeking admission on the basic of bachelor's degree? If yes give details.  
\_\_\_\_\_
9. Experience in years of relevant area ?  
\_\_\_\_\_
10. Number of publications in referred journals, if any?  
\_\_\_\_\_
11. What are the objectives of your doing Ph.D.?  
\_\_\_\_\_
12. What methodology will you follow for doing your Ph.D.?  
\_\_\_\_\_
13. How is your research going to benefit society at large?  
\_\_\_\_\_
14. Have you done preparatory work for your proposed research? Yes/ No. If yes, give details :  
\_\_\_\_\_
15. How will you review the earlier research carried out in your subject. Please Specify.  
\_\_\_\_\_

I confirm that I shall abide by all terms and conditions laid down by the University presently and amended from time to time.

(Ph.D. Scholar)  
Signature

---

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Conducted by Shri Rajasthani Seva Sangh (Mumbai)  
(Established U/S (f) of UGC Act. 1956 vide Act No. F2(5)  
Vidhi/2/2009 of 5-2-2009 of Govt. of Raj)

VIDYA NAGARI, JHUNJHUNU-CHURU ROAD, CHUDELA,  
DIST.-JHUNJHUNU-333001, RAJASTHAN

Tel.: Mob: 08104883405/08104883420

Website : [www.jjtu.ac.in](http://www.jjtu.ac.in) E-mail: [phd@jjtu.ac.in](mailto:phd@jjtu.ac.in), [srss1986@yahoo.co.in](mailto:srss1986@yahoo.co.in)

---

**Consent of Guide/ Supervisor**

To,  
The Vice-Chancellor,  
Shri Jagdishprasad Jhabarmal  
Tibrewala University, Vidyanagari,  
Jhunjhunu, Rajasthan-333001

Sir,  
I Dr. \_\_\_\_\_ registered guide/ supervisor for the Ph.D. programme in the subject  
of \_\_\_\_\_ as per my registration no. \_\_\_\_\_ of University.  
I consented to undertake the responsibility that I shall work as Guide/ Supervisor of Mr./  
Mrs. \_\_\_\_\_ Reg No. \_\_\_\_\_ Registered as a scholar under title.

\_\_\_\_\_ in the subject of \_\_\_\_\_ and instruction given in the  
Act, Ordinance, Statutes of Shri Jagdishprasad Jhabarmal Tibrewala University, Jhunjhunu, (Rajasthan).

Guide/ Supervisor  
(Signature with stamp)

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Ref : \_\_\_\_\_

Date : \_\_\_\_\_

To

The Vice-Chancellor,

Shri Jagdishprasad Jhabarmal

Tibrewala University, Vidyanagari,

Jhunjhunu, Rajasthan-333001

**Sub : Laboratory Approval for Research work**

Dear Sir/Madam

We understand that one of our staff Mr. /Mrs. /Ms. \_\_\_\_\_ (Name of Research Scholar) has enrolled with your esteemed university as a Research Scholar under the Registration No: \_\_\_\_\_ in the department of \_\_\_\_\_ under the guidance of Dr. \_\_\_\_\_. He /She has been permitted to use our lab for the Research Work.

We are happy to inform you that our (Subject) labs are fully equipped (List attached) and have Accreditations from \_\_\_\_\_.

This/These labs under the supervision of the HOD Dr/Shri..... can be conducted by Mr/Mrs/Ms (Name of Research Scholar) for carrying out his/her research practical's.

Name : \_\_\_\_\_ ( Lab in charge/HOD/Principal)

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Thanking You

(Principal /Director)



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**PROGRESS REPORT NO. I / II / III / IV/V/VI**

Reg. No. of Scholar \_\_\_\_\_

To,  
The Vice-Chancellor,  
Shri Jagdishprasad Jhabarmal  
Tibrewala University, Vidyanagari,  
Jhunjhunu, Rajasthan-333001

**Submitted through the Guide**

**Sub: Progress report of Ph.D. Research Work**

(To be submitted every six months)

Sir,

**I am the Ph.D. scholar of the University. My details are given as under:**

- i. Name of the scholar : \_\_\_\_\_
- ii. Name of the Guide : \_\_\_\_\_
- iii. Guide Registration No. : \_\_\_\_\_
- iv. Subject : \_\_\_\_\_
- v. Title of Research : \_\_\_\_\_
- vi. Date of Submission of Research Proposal : \_\_\_\_\_
- vii. Place of Research Centre where research is carried out:  
\_\_\_\_\_

**(1.) The progress of my research work is as follows:**

- i. Chapter-wise progress done as on:  
\_\_\_\_\_
- ii. Chapter - plan of research as mentioned in research proposal:  
\_\_\_\_\_
- iii. Proposed plan for completing the remaining research work:  
\_\_\_\_\_
- iv. List of books, journals etc. referred with footnotes \_\_\_\_\_  
\_\_\_\_\_

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iv. Details of review of literature :

\_\_\_\_\_

v. Details of field visit, if any :

\_\_\_\_\_

vi. Details of laboratory work done, wherever necessary :

\_\_\_\_\_

vii. No. of hours interacted with the Guide :

\_\_\_\_\_

(Signature of Scholar)

**Certificate from the Guide**

This is to certify that Research Scholar Mr./Ms. ....  
Reg. No. \_\_\_\_\_ has interacted with me for \_\_\_\_\_ hours for  
his/her Ph.D. Research work during the period from \_\_\_\_\_ to  
\_\_\_\_\_ at\* \_\_\_\_\_

I further certify that the information given by him/her as mentioned above is true and correct and that the research in the subject matter has been done by him/her under my supervision and guidance is the original work and its validity has been tested by me and it has been done in accordance with the guidelines issued by the UGC and the university from time to time.

Research Guide

Date:

(Signature with stamp)

\* Write the name of the approved research centre / college / institution / university, where the research work is carried out.

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---

**TITLE OF THE THESIS**

(It must be bold and in capital letters. It must not be put in inverted commas)

A

SYNOPSIS

SUBMITTED TO THE

**SHRI JAGDISHPRASAD JHABARMAL TIBREWALA UNIVERSITY,**

FOR THE DEGREE

OF

**DOCTOR OF PHILOSOPHY**

IN

Subject



BY

**X.Y.Z** (*Full name of the candidate*)

(Registration No. ....)

UNDER THE GUIDANCE OF

**Dr. A.B.C** (*Full name of the guide*)

DEPARTMENT OF .....

**SHRI JAGDISHPRASAD JHABARMAL TIBREWALA UNIVERSITY,**

VIDYANAGARI, JHUNJHUNU, RAJASTHAN – 333001

Year .....(The year of submission)

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### Contents of Synopsis

- Title of Thesis / Research
- Introduction :  
It should cover general importance of the research topic taken and its justification in present era (2 – 3 pages)
- Literature Review:  
It must cover the work done by other researchers in this field. It should include review of 30 – 35 research papers published in international and national research papers done in the last 20 years from starting year of registration). Every reference should be represented by 3- 6 lines abstract list of that paper. In case of languages references of books can be considered.
- Objective of the present work. (Point wise)
- Hypothesis (if applicable)
- Work Plan and Methodology
- References / Bibliography

**Note: - The researcher would be required to adhere to the following standards for Submission of Ph. D. Synopsis:**

1. 1 Sides printing
2. 12 font sized for English typing, Printing either in Times New Roman or Arial font.
3. 14 font sized for Hindi typing, Printing in KrutiDev 010 or DevLys 010font.
4. Margins :-
  - Left: 1.5 inches
  - Right : 1.0 inches
  - Top : 1.0 inches
  - Bottom : 1.0 inches
  - Line Space: 1.5 inches
5. Page size A4

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### Points for consideration for preparation of Synopsis

Information must include according to chapters.

References must include between last 20 years.

Which references are included in written matter, only those references have to include in reference/ bibliography chapter.

References must written in alphabetic order.

Matter must not copied from net, it must be typed.

A Certificate Attached after title page with signature of research scholar and his/ her supervisor (signature and seal).

Please submit one hard copy and 2 soft copies.

Synopsis is forwarded to UGC site Shodhgangotri.

Number of pages in complete Synopsis should be less than 24 pages.

References must be in one format given below (more than 30 latest references must be included in synopsis)

Synopsis should be in spiral bound.

S.No. Author Name (year), Title of article/ Book, Journal Name, Volume No., Issue No., Page No.

One page of information page attached with detail of those things both in soft and hard copy

1. Title of Research work
2. Name of Scholar
3. Subject
4. Registration No:
5. Name of Guide
6. Designation
7. Guide working place

Signature of the Guide  
with Seal

Signature of Scholar

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---

**TITLE OF THE THESIS**

(It must be bold and in capital letters. It must not be put in inverted commas)

A

**SUMMARY**

SUBMITTED TO THE

SHRI JAGDISHPRASAD JHABARMAL TIBREWALA UNIVERSITY,

FOR THE DEGREE

OF

DOCTOR OF PHILOSOPHY

IN

Subject



BY

X.Y.Z (Full name of the candidate)  
(Registration No. ....)

UNDER THE GUIDANCE OF  
Dr. A.B.C (Full name of the guide)

DEPARTMENT OF .....

SHRI JAGDISHPRASAD JHABARMAL TIBREWALA UNIVERSITY,  
VIDYANAGARI, JHUNJHUNU, RAJASTHAN – 333001  
Year .....(The year of submission)

**Contents of Summary**

**The Candidate need to cover the following :**

1. Title page
2. Information Page
3. Introduction
4. Objective
5. Results and discussion

**Note : The number of pages of summary should be between 20-25 pages and Submit three hard copies and two soft copies.**

**The researcher would be required to adhere to the following standards for Submission of Ph. D. Summary :**

1. 1 Sides printing
2. 12 font sized for English typing, Printing either in Times New Roman or Arial font.
3. 14 font sized for Hindi typing, Printing in KrutiDev 010 or DevLys 010font.
4. Margins :-
  - Left: 1.5 inches
  - Right : 1.0 inches
  - Top : 1.0 inches
  - Bottom : 1.0 inches
  - Line Space: 1.5 inches
5. Page size A4

**One page of information page attached with detail of those things both in soft and hard copy**

1. Title of Research work
2. Name of Scholar
3. Subject
4. Registration No :
5. Name of Guide
6. Designation
7. Guide working place

Signature of the Guide  
with Seal

Signature of Scholar

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**TITLE OF THE THESIS**

(It must be bold and in capital letters. It must not be put in inverted commas)

A  
THESIS  
SUBMITTED TO THE

SHRI JAGDISHPRASAD JHABARMAL TIBREWALA UNIVERSITY,

FOR THE DEGREE

OF

DOCTOR OF PHILOSOPHY

IN  
Subject



BY

X.Y.Z (Full name of the candidate)  
(Registration No. ....)

UNDER THE GUIDANCE OF  
Dr. A.B.C (Full name of the guide)

DEPARTMENT OF .....

SHRI JAGDISHPRASAD JHABARMAL TIBREWALA UNIVERSITY,  
VIDYANAGARI, JHUNJHUNU, RAJASTHAN – 333001  
Year .....(The year of submission)



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### Annexure -'D' Contents of Thesis

The page numbers below are minimum page numbers for the chapter. This is a broad guide lines and Researcher is free to have more number of pages as per the requirement of the research. Serial numbers 1 to 12, 17 and 18 should be given in roman numbers. The final thesis should not be less than 250 pages without considering the pages in Roman numbers.

Sr. No.	Chapter Scheme	Min. Page
1	Title Page	
2	Declaration By The Candidate	
3	Certificate of Supervisor (s)	
4	Certificate of Laboratory Used (If Applicable)	
5	Acknowledgement	
6	Abstract	
7	Table of Contents	
8	List of Figures	
9	List of Tables	
10	Abbreviations (If Applicable)	
11	Notations (If Applicable)	
12	Nomenclature (If Applicable)	
13	Chapter-1 Preamble 1.1 Introduction (Topic Background/History/Criticality) 1.2 Problem on Hand 1.3 Research Objectives 1.4 Scope of research work 1.5 Organization (If Applicable) Where work is carried out (Product, Processes, Profile) 1.6 Hypothesis (If Applicable) (Introduction, description, detail, history, criticality etc.)	10  2 1 1 10 5
14	Chapter-2 Review of Literature	35
15	Title of Chapter -3 3.1 Section Heading Name 3.2 Section Heading Name 3.2.1 Second Level Section Heading 3.3 Section Heading Name 3.3.1 Second Level Section Heading 3.3.2 Second Level Section Heading 3.3.2.1 Third Level Section Heading Title of Chapter-4 And so on ... (According to Research Work) All these above chapters should contain the following:- (Research Methodology/Experimental Work/Data Analysis, Result & Discussion)	130
16	Chapter-6 Summary and Conclusion 6.1 Summary & Conclusion 6.2 Recommendations 6.3 Future Scope 6.4 Limitations of research work	 3 1 1 1
17	References/ Bibliography	
18	Appendix (Publications Based on Thesis with editor certificate and Additional Information if any)	
Note: - 50 pages and more pages can be increased in Sr. No. 13, 14, 15 & 16. Not more than 15 pages in every category.		

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The researcher would be required to adhere to the following standards for Submission of Ph. D. thesis :

1. 1 Sides printing
2. 12 font sized for English typing, Printing either in Times New Roman or Arial font.
3. 14 font sized for Hindi typing, Printing in Kruti Dev 010 or DevLys 010 font.
4. **Margins :**
  - Left: 1.5 inches
  - Right : 1.0 inches
  - Top : 1.0 inches
  - Bottom : 1.0 inches
  - Paragraph space: after of before : 0 inches
5. Page size A4
6. Colour of thesis should be blue, red or Black.

**Note : Graph, table or photos not more than 20% in thesis out of 280 pages.**

References are to be listed after last chapter. The scholar may however use reference MLA style, IEEE or APA style but they should preferable write the given below.

### **For Journals :**

1. Prakas, K. (2011). Feedback and optimal sensitivity: Model reference transformations, multiplicative seminorms and approximate inverses. *IEEE transactions on Automatic control*, 26(2): 301-320.
2. Ram, R., Krishana, S. and Peter, K. (2005a). Risk sensitive estimation and a differential game. *IEEE transactions on Automatic control*, 39(9): 1914-1918.
3. Ram, R., Krishana, S. and Peter, K. (2005b). Differential rectification using control points. *IEEE transactions on Automatic control*, 55: 914-918

### **Dissertations and Thesis :**

- 1 Mack, S. (2000). "Desperate Optimism" M.S. Thesis, University of Calgary, Canada.

### **Books :**

Bewley J. D. and Pacey J., (1978), Desiccation-induced Ultrastructural changes in drought-sensitive and drought-tolerant plants. In: *Dry biological systems*, J. H. Crowe and J. S. Clegg (eds.), Academic Press, New York. 53-73

Levitt J. (1980), Responses of plants to environmental stresses. Vol. I. In: *Chilling, freezing, and high temperature stress*. London, New York, Toronto: Academic Press. 23-29

APPENDIX -1

**DECLARATION BY THE CANDIDATE**

I declare that this thesis entitled “..... (In bold running letters).....”  
is my own work conducted under the supervision of Dr. (Name of the Supervisor) and the co- supervision  
of Dr. (Name of the Co-supervisor) approved by the Research Degree Committee of the University and  
that I have put in more than 200 days/ 600 hrs of attendance with the supervisor.

I further declare that to the best of my knowledge this thesis does not contain any part of any work  
which has been submitted for the award of any degree either by this university or by any other  
university/ deemed university without a proper citation.

(Signature of the candidate)

Name :.....

Registration Number :.....

APPENDIX -2

**CERTIFICATE OF THE SUPERVISOR**

It is certified that this work entitled “..... (In bold running letters).....”  
is an original research work done by Shri/ Smt. / Km. ....  
under my supervision for the degree of Doctor of Philosophy in .....  
to be awarded by Shri Jagdishprasad Jhabarmal Tibrewala University, Jhunjhunu, Rajasthan, India  
and that the candidate has put the attendance of more than 200 days/600 hrs with me.

To the best of my knowledge and belief this thesis

- I. embodies the work of candidate himself / herself,
- II. has duly been completed,
- III. fulfils the requirements of the ordinance related to Ph.D. degree of the University and
- IV. it is upto the standard in respect of both content and language for being referred to the examiner.

Signature of the Supervisor  
(with stamp)

Name: Dr. ....

---

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**CERTIFICATE OF THE CO-SUPERVISOR**

It is certified that this work entitled “..... (In bold running letters).....”  
is an original research work done by Shri/ Smt. / Km. ....  
under my co-supervision for the degree of Doctor of Philosophy in .....  
to be awarded by Shri JagdishprasadJhabarmal Tibrewala University, Jhunjhunu, Rajasthan, India  
and that the candidate has put the attendance of more than 200 days/600 hrs with me.

To the best of my knowledge and belief this thesis

- I. embodies the work of candidate himself / herself,
- II. has duly been completed,
- III. fulfils the requirements of the ordinance related to Ph.D. degree of the University and
- IV. it is upto the standard in respect of both content and language for being referred to the examiner.

Signature of the Co-Supervisor  
(with stamp)

Name: Dr. ....

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## Think Ph.D. Join JJTU

### Format for Publication of Research Paper

Title :

Name of Author :

Affiliation :-

1. The name of JJT University, Jhunjhunu, Rajasthan, India must be given by putting on the name of scholar.
2. Guides affiliation can be the place of working of the guide.
3. Other affiliation if any

Rest format of Research paper should be the same as proposed by concerned journal.

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APPENDIX - 3

(On Rs. 100 non-judicial stamp paper with notary attested)

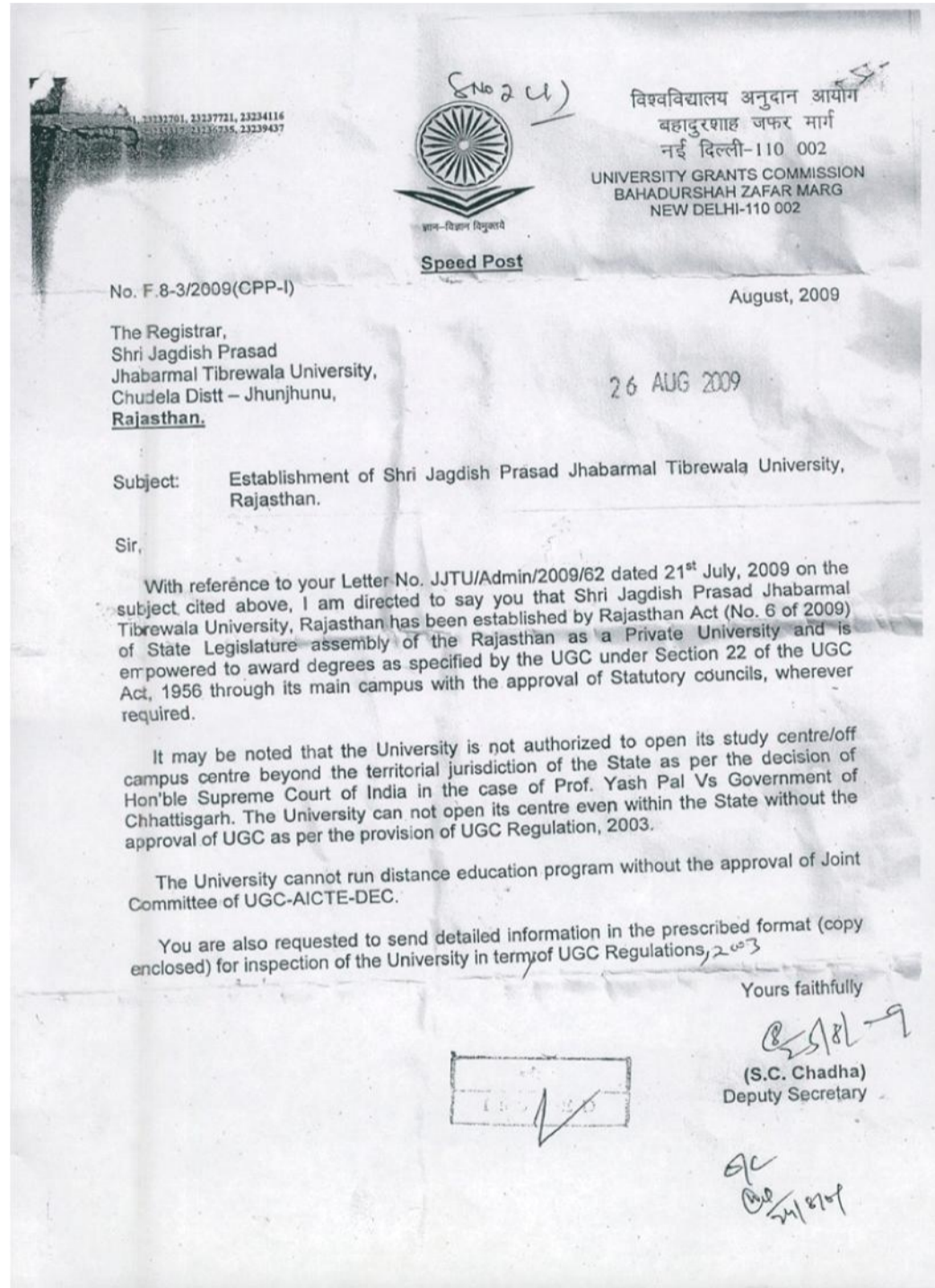
AFFIDAVIT

I, ... (Name of the candidate), the Ph.D. scholar at the Reg. no. .... in (Subject) ..... thesis entitled "..... (In bold running letters)" .... under the supervision of Dr. (Name of the Supervisor) and the co- supervision of Dr. (Name of the Co-supervisor) approved by the university, solemnly affirm that the thesis submitted by me is my own work. I have not copied it from any source.

I further say that if any copy paste is found anywhere in my thesis at a later stage, the thesis can be cancelled and the degree withdrawn.

(Signature of Candidate)

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ISO Certificate



Think Ph.D. Join JJTU

AIU Affiliation Certificate

8695  
24/5/14

प्रो. डी. एस. चौहान  
महासचिव (अतिरिक्त प्रभार) एवं  
कुलपति  
जी० एल० ए०, विश्वविद्यालय, मथुरा  
**Prof. D.S. Chauhan**  
Secretary General (Addl. Charge), and  
Vice-Chancellor  
G L A University, Mathura



भारतीय विश्वविद्यालय संघ  
ए० आई० यू० हाउस, 16, कामरेड इंद्रजीत गुप्ता मार्ग, नई दिल्ली-110 002  
**ASSOCIATION OF INDIAN UNIVERSITIES**  
AIU HOUSE, 16, Comrade Indrajit Gupta Marg, New Delhi 110 002

MEET/GC/324/2014 | 15/5/14  
May 19, 2014

Dear Shri Mehta, .

The Governing Council of the Association of Indian Universities at its 324<sup>th</sup> Meeting held on April 24, 2014, at New Delhi considered the application for grant of provisional membership of the Association of Indian Universities (AIU) to Shri Jagdishprasad Jhabarmal Tibrewala University, Jhunjhunu and resolved to grant the same with effect from the year 2014-15.

I am enclosing a copy of the conditions for granting provisional membership, approved by the General Body of the Association at its 84<sup>th</sup> Annual Meeting (Business Session) held on November 14, 2009 for your kind information (Annexure-I). I am enclosing some literature describing various activities of the Association which I am sure you will find useful. You are also requested to send your bio-data on the enclosed proforma for our records. You are requested to send annual membership subscription of ₹.10,000/- processing fee (one time) through demand draft favouring "Association of Indian Universities", New Delhi.

With regards,  
Yours sincerely,  
  
(Prof D S Chauhan)

Encl: As above.

Shri Avinash Mehta  
Vice Chancellor  
Shri Jagdishprasad Jhabarmal Tibrewala University  
Churu Buishau Road  
Chudela  
District Jhunjhunu  
Rajasthan 333 001  
[srss1986@yahoo.co.in](mailto:srss1986@yahoo.co.in)

Phone : 91-11- 23236105 (O); Fax: 91- 011- 23232131; e-mail : sgoffice@aiuweb.org

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**3<sup>RD</sup> CMAI CCI TECHNOLOGY EDUCATION EXCELLENCE AWARDS 2015**  
Presented to

**Shri Jagdishprasad Jhabarmal Tibrewala University**  
Excellent University for Ph.D. Research Program

by

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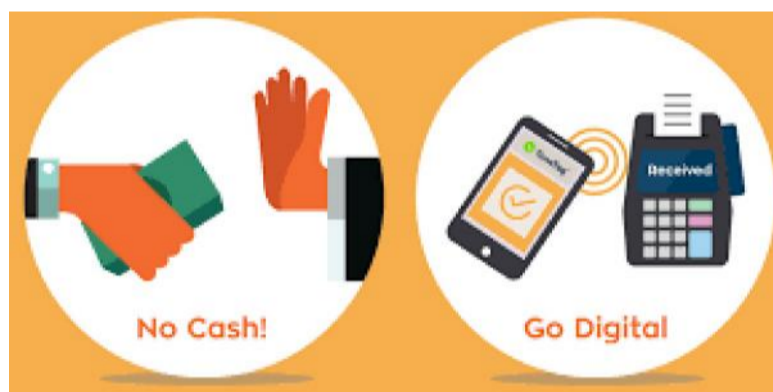
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