# The question paper should be answered only in English except in the case of admission to language courses for which the question paper should be answered in the language concerned.

The performance of the candidates in the test consisting of Objective or Multiple Choice Questions will be evaluated using the OMR technology as listed below. The candidates will be required to mark the answers in the OMR Sheet with a blue or black ball-point or sketch pen during the test. Necessary instructions will be given in the relevant question papers.

## The question paper for the following subjects shall be answered on OMR sheet:

I.M.Sc. and I.M.A. (5-year Integrated) in different disciplines; M.Sc. - Mathematics/Applied Mathematics, Statistics-OR, Physics, Chemistry, Biochemistry, Plant Biology & Biotechnology, Molecular Microbiology, Animal Biology & Biotechnology, Ocean and Atmospheric Sciences, Health Psychology; Master of Public Health (MPH); M.A. - English, Philosophy, Hindi, Telugu, Applied Linguistics, Comparative Literature, Sanskrit Studies, History, Political Science, Sociology, Anthropology, Gender Studies, Economics, Financial Economics, Communication, MPA Theatre Arts, MFA Painting, Print Making, Sculpture, Art History, and Visual Studies, MBA Health Care and Hospital Management, MBA Business Analytics, Executive MBA, Ph.D. in Applied Mathematics, Computer Science, Physics, Electronics Science & Engineering, Earth, Ocean, and Atmospheric Science, Chemistry, Biochemistry, Plant Sciences, Microbiology, Animal Biology, Biotechnology, Hindi, Telugu, , Comparative Literature, Applied Linguistics, Translation Studies, Political Science and Technology and Integrated M.Sc./Ph.D. Biochemistry and Molecular Biology, Animal Biology, Animal Biology, Animal Biology, animal Biology, and Technology and Biotechnology and Certificate course on Publishing.

The question paper of some more subjects viz., M.P.A. Music, Ph.D. in English, Philosophy, Urdu, Sociology, Regional Studies, Sanskrit Studies need to be answered partly in OMR sheet and partly in a separate answer book as per the instructions provided in the question paper.

There is a possibility for some more subjects to be added in the above list. Therefore, the instructions on the question paper concerned shall be final. The duration of the written test for all courses will be for two hours. Late coming is allowed up to 15 minutes from the commencement of Exam and candidates will be allowed to leave the examination hall after completion of the exam only.

## Applying to more than one programme

A candidate is free to apply for admission to as many courses as she/he wishes after ensuring from the schedule for the Entrance Examination that there is no clash in the subjects of his/her choice. The University has made the best possible efforts to avoid overlap in the schedule of examinations of related subjects to the extent possible. The candidates are advised to study the examination schedule carefully before deciding on their choice of subjects.

## **VERY IMPORTANT**

Please read the following carefully:

The question paper for the entrance test for all courses shall consist of two parts - Part-'A' and Part- 'B'.

All candidates applying for Ph.D. courses may refer to UGC Regulations 2016 for details at <u>http://www.ugc.ac.in/pdfnews/3375714\_API-4th-Amendment-Regulations-2016.pdf</u>

For Ph.D. courses - please see the Chapter on 'Schools of Study' for further details. The Question paper of Ph.D. courses shall consist of 70 marks in two sections, as per the UGC Regulations 2016.

# Part A- 35 marks, will be on Research Methodology

**Research Methodology:** "The process used to collect information and data to make decisions. The methodology may include publication research, interviews, surveys, and other research techniques, and could include both present and historical information". Questions may also include those on Quantitative methods, Data interpretation, Aptitude, and Logical Reasoning.

# Part B: 35 marks, will be on the subject concerned.

Negative marking in the whole Question paper or for any Part shall be the choice of the School/Department/Centre.

The Entrance Exam marks shall be used for shortlisting candidates to be called for interview. The Interview will be conducted for 30 marks.

The basis of final shortlisting of candidates for admission will be on the merit of marks obtained in written test and Interview put together.

The Admission Committees of various Schools will determine the due weightage to the following components like:

- Research Proposal and its defense
- Academic Record/Performance in PG/Gold Medal/Performance in the Written Test
- Having fellowship/M.Phil./NET/SET
- Publications
- Research Experience, etc.

The details of the exact breakup for each subject are available at the end of the Prospectus.

# IN CASE OF A TIE

The following criteria shall be followed, in sequence to resolve ties, where candidates secure the same marks in the written test:

First criterion: Marks obtained in Part - A of the written test.

**Second criterion:** Marks obtained by the candidates in the qualifying degree/other examination. If the final result is not available, then the marks up to the 2nd year will be taken into account.

**Third criterion:** Marks obtained in the degree examination immediately preceding the qualifying degree examination.

Fourth criterion: Marks obtained in the next lower public examination.

Interviews for candidates short-listed for admission to Ph.D. based on the written test **will be announced later.** 

# Ph.D.

The School has a very vibrant Ph.D programme with more than 60 registered students currently, both Indian and foreign nationals, as on date and more than 120 scholars have completed their PhD till now. As the School always has a high priority for research, it strongly encourages fresh and brilliant students to participate in the above exciting research programmes as full-time/part-time Ph.D. students. School further offers Visvesvarya PhD Fellowships (sponsored by DeitY) for supporting brilliant Ph.D. students. This is subject to sanction of the Govt. of India (Admission Notice will come as a separate advertisement). Further, details can be found at <a href="http://phd.medialabasia.in/">http://phd.medialabasia.in/</a>. The School is also recognized as an AICTE Minor QIP Centre for Ph.D. Programme. For further details, please refer to QIP brochure available at <a href="http://qip.iitd.ac.in/qipadm2017/QIP\_Brochure\_Ph.D.pdf">http://qip.iitd.ac.in/qipadm2017/QIP\_Brochure\_Ph.D.pdf</a>

The **Ph.D. programme** is offered on full time, part time and external registration basis as per the university regulations. Candidates who have the required qualifications and are doing teaching/research in recognized institutions or researchers from companies registered with STPI/NASSCOM/Central Government Organizations who operate within the jurisdiction of the University can apply for part time admission, which is available during 2021-22. Interested candidates are advised to study the areas of research from the School and faculty profiles. Please visit School website <u>http://scis.uohyd.ac.in</u> for details. **Candidates interested in doing research in the following areas are strongly encouraged to apply.** 

- Machine Learning, rough sets and soft computing
- Data science, analytics and big data
- Cryptography and cybersecurity
- Social networks analysis and graph theoretic techniques
- Software defined networks and network security

# Entrance Examination

Admission Process: Please refer to appropriate section in the prospectus about UGC Regulations 2016. Admission will be through a written test followed by an interview. The candidates who have been awarded JRF Fellowship after writing a National-level written test will be exempted from writing written test of the University and will be directly called for the Interview.

# Written Test Format and Syllabus

The written test will consist of *only objective type* questions. 50% of questions shall be from Research Methodology and the other 50% shall pertain to the concerned subject. The paper shall have two parts, Part A and Part B. The following syllabus is proposed for the PhD entrance examination

# PART A: Research Methodology:

- Quantitative Methods: Data preprocessing, graph plotting, plotting functions and data, statistical data analysis.
- Research: Technical Comprehension, Meaning, characteristics and types of research; Steps of research; Methods of research; Research Ethics.
- Aptitude and Reasoning: Reasoning, Logical Reasoning, Data Interpretation.

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• Computer Applications: Flow Charts, Problem Solving.

## PART B: Computer Science:

Computer Organization, Computer Programming, Discrete Mathematics, Data Structures, Algorithms, Operating Systems, Database Management Systems, Graph Theory, Computer Networks, and Automata.

The written test is for total of 70 marks and both Part A (35 questions) and Part B (35 questions) will have equal weightages.

## **Interview Process**

Candidates must indicate their research interest at the time of the interview. *All candidates must come prepared with a tentative research plan* write-up of maximum 4 pages and are encouraged to submit details of research papers/technical reports (if any), they have authored.

## Foreign candidates

Foreign nationals seeking admission in PhD programme should have the required basic qualifications. Candidates must demonstrate their ability to communicate in English. Following are the guidelines for admission to PhD:

Foreign students are required to submit past academic records, three reference letters, and a statement of purpose on the research topic of their interest. They must have good ability to communicate in English. In order to support the claim for admission into PhD, the following guidelines are stipulated:

- Students residing in India and who have taken prior qualifying education in India **have to appear for the interview** with all required supporting documents
- Both GRE and TOEFL/IELTS scores are to be submitted at the time of admission

# Please also read section on Admission of Foreign Nationals in the prospectus.

## 5-year Integrated M.Tech. in Computer Science

The School has introduced a 5-year Integrated M.Tech. Programme in Computer Science with effect from the academic year 2014-15. The students will be awarded M.Tech (CS) degree at the end of five years. It is to be noted that there is no exit option. This programme is intended to provide` a high quality computer science education with a curriculum that is state-of-the-art. The School boasts of a very low student-teacher ratio that allows faculty to give individual attention to students.

## Admission Process

The admission to 5-year Integrated M.Tech. in Computer Science will be done through JEE(Main) examination conducted in 2021 and the counselling for admission will be done by Joint Seat Allocation Authority (JOSAA)/Central Seat Allocation Board (CSAB).