



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

MITHAPUR PATNA-800001

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Ref. no: 005/Exam/200/AKU/2020- 183

Date: - 19/01/2021

## **NOTICE**

### **Ph.D. Admission Test-(PAT)-2021**

Aryabhatta Knowledge University, Patna is going to conduct **Ph.D. Admission Test (PAT)-2021**, as per Regulations approved by the Governor's Secretariat, Bihar vide memo no. BSU-05/2010/2684/GS (I) dated 21/09/2017. for the Ph.D. Programme in the following subjects:

| Sr. No. | School/Faculty                                     | Programme                       |
|---------|--|---------------------------------|
| 1.      | <i>School of Health &amp; Medicine</i>             | <i>Ph.D. in Medical Science</i> |
|         |  | <i>Ph.D. in Dentistry</i>       |
| 2.      | <i>School of Engineering &amp; Technology</i>      | <i>Ph.D. in Engineering</i>     |
| 3.      | <i>School of Educational Training and Research</i> | <i>Ph.D. in Education</i>       |

➤ **Criteria for appearing in the Ph.D. Admission Test (PAT)-2021 are as follows:**

A candidate shall be permitted to pursue research for the Ph.D. degree in the subject in which he/she holds Master's degree.

➤ **Eligibility**

**1. Ph.D. in Medical Sciences**

- Educational Qualification:* Degree of Doctor of Medicine (D.M.); Degree of Master of Chirurgiae (M.Ch.); Degree of Doctor of Medicine (M.D.); Degree of Master of Surgery (M.S.); Postgraduate Diploma in the Faculty of Medicine; Diplomat of National Board of Examination of India.
- 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 point scale wherever grading system is followed).
- A relaxation of 5% of marks, from 55% to 50%, or equivalent relaxation of grade, will be allowed for those belonging to SC/ST/EBC/OBC/Differently-abled categories of candidates.

**2. Ph.D. in Dentistry**

- Educational Qualification:* Master Degree in Dentistry for Ph.D. in Dental Science.

- b) 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 point scale wherever grading system is followed).
- c) A relaxation of 5% of marks, from 55% to 50%, or equivalent relaxation of grade, will be allowed for those belonging to SC/ST/EBC/OBC/Differently-abled categories of candidates.

### **3. Ph.D. in Engineering**

- a) *Educational Qualification:* Possessing M. Tech. or equivalent Degree with a minimum of 6.5 CGPA in a 10 point scale or 60% in aggregate at M. Tech. Level.
- b) Possessing B.Tech. Degree with minimum of 8 CGPA in a 10 point scale or 80% of marks in aggregate.
- c) Possessing B.Tech. Degree with a minimum of 7.5 CGPA in a 10 point scale or 70% of marks in aggregate for Teacher working in AICTE approved Institute having at least 10 years of teaching experience. Faculty having less than 10 years experiences will come Possessing B.Tech. Degree with minimum of 8 CGPA in a 10 point scale or 80% of marks in aggregate and Faculty members appointment of Substantive post of constituent and Affiliated colleges' of the university having at least one year of service.
- d) A relaxation of 5% of marks, from 55% to 50%, or equivalent relaxation of grade, will be allowed for those belonging to SC/ST/EBC/OBC/Differently-abled categories of candidates.

### **4. Ph.D. in Education**

- a) *Educational Qualification:* The candidates who have qualified for Master's degree in Education from any University recognized by University Grants Commission with not less than 55% of marks or a CGPA of 5.51 and above in the 10.00 point scale under CBCS, under the faculty of Education are eligible to register for Ph.D. in this University under this category.
- b) Master's Degree Qualifying Marks 55% of marks or 5.51 of CGPA and above in the 10.00 point scale under CBCS.
- c) A relaxation of 5% of marks, from 55% to 50%, or equivalent relaxation of grade, will be allowed for those belonging to SC/ST/EBC/OBC/Differently-abled categories of candidates.

**Note: Appearing candidates are not eligible for Ph. D. Admission Test (PAT) - 2021.**

#### **➤ Exemptions from the written Test of Ph.D. Admission Test (PAT)-2021:**

Candidates who have secured grants for research such as fellowship/ scholarship/ associate ship etc. by qualifying UGC NET/ CSIR NET/ GATE/ MHRD Scholarships/ Teacher Fellowship/ DBT/ ICMR/ ICAR/ DST-INSPIRE/ CSSIR, ICHR etc.

Assistant Professors, Associate Professor and Professor who has been appointed on substantive post and the UGC pay scale in the Teaching departments or the University or a constituent college of the University who have completed their probation successfully with an experience of at least two years of uninterrupted service would be considered under this category. Teachers appointed in self-financed courses will not be exempted from the Test.

Non-teaching employee of the University, who are holding substantive appointment for more than five years and having at least 55% marks in Master's degree in the subject concerned and with at least two research papers published in any reputed refereed journal or journals identified by the UGC would be considered under this category.

**Note: - Candidates, who are exempted from the written test of Ph. D. Admission Test (PAT)-2021, have to submit their application with the payment of the required fee.**

➤ **Procedure for Ph.D. Admission Test (PAT)-2021:**

Ph.D. Admission Test (PAT)-2021 is a written test comprising of two papers of 100 marks each.

**Paper-I (100 Marks)** - Shall comprise of objective/ multiple type questions form general and research aptitude.

**Paper-II (100 Marks)** - Subjective/objective type in the subject concerned based on the syllabus of Post-Graduate courses of Aryabhata Knowledge University.

**Interview-(20 Marks)** - It is mandatory for the applicants, who have qualified the written test and those exempted from the written test to appear before the Interview Board.

➤ **The minimum marks to qualify the written test will be as follows:**

- a) For General Candidates: - 50% of the aggregate marks
- b) For Reserved Category Candidates: - 45% of the aggregate marks.
- c) Reservation will be followed as per the norms of reservation of the Government of Bihar.
- d) The result of the Test will be valid for three years after the declaration of the result.
- e) Scrutiny of the answer book shall not be allowed.
- f) The Ph.D. Admission Test (PAT)-2021 will be under the preview of the Rule of RTI Act, 2005.

**Note: -**

**1. The selection of the candidate will be on the basis of the marks obtained in the written test and the interview combined together.**

**2. Seats shall be allotted as per the availability of vacancies and against the reservation norms.**

➤ **Pattern of Question Papers and syllabus:**

**Paper-I**

Multiple Type Questions  
Number of questions- 50  
Duration of Examination- 1 Hour  
No negative marking for wrong answer  
Examination will be conducted on OMR sheet.

**Note: - Students are not allowed to take the question booklet with them.**

**Paper-II**

Subjective Type Questions  
Duration of Examination- 2 Hours  
Based on the syllabus of the Post-Graduate Courses of the University.  
The paper will be divided into three Groups.

**Marks distribution**

|             |                      |
|-------------|----------------------|
| Group A- 30 | Marks - 05 x 06 = 30 |
| Group B- 40 | Marks - 04 x 10 = 40 |
| Group C- 30 | Marks - 02 x 15 = 30 |

Group A- Total eight short answer type questions to be set out of which five are to be answered (Expected length of each answer- 150 words approximately)

Group B- Total seven questions to be set of which four are to be answered (Expected length or each answer- 200 words approximately)

Group C- Total four questions to be set of which two are to be answered  
(Expected length of each answer 500 words approximately)

**Note: - The candidates are directed to answer questions in sequential order.**

➤ **Schedules (Date Time) and Venue for Ph.D. Admission Test (PAT)-2021:**

|  |   |
|--|---|
| Start of submission of Form            | : 19 <sup>th</sup> January 2021   |
| Last date of submission of Form        | : 19 <sup>th</sup> February 2021  |
| <b>Last date of submission of Form</b> | <b>: 22<sup>nd</sup> February 2021</b><br><i>(With extra late fine of Rs. 1000/-)</i> |
| Date of Examination                    | : 28 <sup>th</sup> February 2021.   |

**Hours of Written Examination:**

- Paper 1- (Objective) - 1 Hour.
- Paper II (Subjective) - 2 Hours.

**Note: The time and venue would be decided as per the applications received.**

➤ **The applications will be filled on the payment of fee as per follows:**

- Rs. 1500/- (One Thousand and Five Hundred only)** for applicants belonging to General and OBC category.
- Rs. 1000/- (One Thousand only)** for applicants belonging to SC, ST, EBC, EWS and Differently-abled categories category.
- Late fine for submission of application: - 1000/- (Extra one thousand only).**

➤ **Demand Draft (DD)**

The Demand Draft must be issued from any nationalized bank **Payable at Patna**, in favour of

**“AKU, REGISTRATION AND EXAMINATION FUND”**

➤ **Application form sent to**

The Application form duly supported with the attested photo copies of the documents and Demand Draft (DD) must reach to:

To,  
**The Controller of Examinations,  
Aryabhatta Knowledge University, Patna  
Gyan Parisar, Mithapur, Patna – 800001. (Bihar)**

➤ **Document attached with the application**

- Attested copy of the Marks-sheet of the qualifying examination.
- Attested copy of the Matriculation Certificate for the proof of age.
- Attested copy of the Caste Certificate, issued by an officer authorised by the Govt. for the purpose reserve category candidates, seeking admission on reserved quota.
- Attach two copies of colour photograph (Write your name, Acknowledgement No. on the reverse)

- The Application form must reach on or before the last date for receipt of the form through Speed post/Registered post/ Proper Medium.
- **Please attach the Demand Draft (Write your name, Mobile No. on the reverse of Demand Draft(DD))**

➤ **Syllabus**

**Syllabus for Paper-I-(General and Research Aptitude Test)**

Brief outline of the topics to be covered in paper- I

|    | <u>Topic</u>  | <u>No of Questions</u> | <u>Marks</u> |
|----|---|------------------------|--------------|
| 1. | Research Aptitude                                   | 10                     | 20           |
| 2. | Language Aptitude                                   | 10                     | 20           |
| 3. | Logical Reasoning                                   | 05                     | 10           |
| 4. | Numerical Ability                                   | 05                     | 10           |
| 5. | Data- Interpretation                                | 05                     | 10           |
| 6. | Environment and Sustainability                      | 10                     | 20           |
| 7. | Computer and Information & Communication Technology | 05                     | 10           |
|    | <b>Total</b>  | <b>50</b>              | <b>100</b>   |

**Research Aptitude:** Meaning; Aim; nature and scope of research: Prerequisites of Research; Types of Research; Fundamental or pure research; applied research; Research Problem; Meaning of research problem; source of research problem; Methods of Research; Research Proposals and Synopsis; Ethics in Research

**Language Aptitude:** High School Level

**Logical Reasoning:** High School Level

**Numerical Ability:** High School Level

**Data Interpretation:** Qualitative and Quantitative Data; Mapping of Data: Representation and Interpretation of graphs

**Environment and sustainability:** Sources of Air, Water and Soil Pollutions and their mitigation. Noise Pollution. Global Warming, Ozone Depletion and Acid Rain Current environmental issue and movements in India: Chipko Movement. Silent Valley, Narmada Dam, Tehri Dam, Almetti Dam. Etc. Global Environmental Movements, Bio-diversity, and Agenda 21, Paris Convention. Montreal Protocol etc.

**Computer and Information & Communication Technology (ICT) Awareness:** General Abbreviation and Terminology of Computers and ICT, Meaning, Advantages, Uses and Risks of Digitalization, Basics of Internets.

**Syllabus for Paper-II**

Subject specific test, Subjective type in the subject concerned.

Sd/-  
**Controller of Examinations**  
**Aryabhata Knowledge University,**  
**Patna**