



# ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

MITHAPUR PATNA-800001

➤ **Criteria for appearing in the Ph. D. Admission Test (PAT) 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. Medical Sciences**

- a) *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.
- b) Master's degree with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7point 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.

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

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

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) have to submit their application with the payment of the required fee.**

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

Ph.D. Admission Test (PAT) 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 Aryabhatta 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) 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 of 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.**

**Hours of Written Examination:**

- a) Paper 1- (Objective) - 1 Hour.
- b) Paper II (Subjective) - 2 HourS.

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

➤ **Syllabus**

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

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

	Topic_____	<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**  
**Aryabhatta Knowledge University,**  
**Patna**