

### **NOTICE**

Admissions are open for the following **MPhil programs** at the University of Narowal:

1. M.Phil. Botany
2. M.Phil. Education
3. M.Phil. Environmental Science
4. M.Phil. Management Sciences
5. M.Phil. Mass Communication & Media
6. M.Phil. Mathematics
7. M.Phil. Physics
8. M.Phil. Zoology
9. M.Phil. Food Science & Technology

### **Entry Test Requirement**

All applicants who **do not possess a valid GAT (General)** result are required to appear in the **University's Entry Test** as part of the admission process.

**Max Time Allowed:** 02 Hours

### **Sample Questions**

#### **General Aptitude Section (50 Marks)**

##### **1. Quantitative Reasoning (20 Marks)**

**Q1.** If  $4x - 7 = 25$ , what is the value of  $x$ ?

- a) 8                      b) 7                      c) 6                      d) 9

**Q2.** A shopkeeper bought an item for Rs. 600 and sold it at a 15% profit. What was the selling price?

- a) Rs. 690              b) Rs. 660              c) Rs. 705              d) Rs. 720

**Q3.** What is the next number in the sequence: 2, 6, 12, 20, \_\_\_\_?

- a) 30                      b) 28                      c) 24                      d) 26

### **2. Qualitative Reasoning (20 Marks)**

**Q1.** Choose the synonym for “**resilient**”:

- a) fragile                      b) flexible                      c) rigid                      d) hesitant

**Q2.** Complete the analogy:

Book is to Reading as Knife is to:

- a) Drawing                      b) Cutting                      c) Writing                      d) Cleaning

**Q3.** Which sentence is grammatically correct?

- a) She don't likes cold coffee.                      b) He go to school every day.  
c) They were playing outside.                      d) The boy run fast.

### **3. Analytical Reasoning (10 Marks)**

**Q1.** All engineers are creative. Some creative people are musicians. Which of the following must be true?

- a) All musicians are engineers.                      b) Some engineers are musicians.  
c) Some musicians may be creative.                      d) All creative people are engineers.

**Q2.** If all apples are fruits and all fruits grow on trees, then:

- a) All trees are apples.                      b) All fruits are apples.  
c) All apples grow on trees.                      d) None of the above.

**Q3.** A is taller than B. C is taller than A. Who is the tallest?

- a) A                      b) B                      c) C                      d) Cannot be determined

### Subject-Relevant Sample Questions (50 Marks)

#### **M.Phil. Botany**

Q1. Which plant hormone promotes cell elongation?

- a) Cytokinin   b) Auxin   c) Ethylene   d) Absciscic Acid

Q2. The process by which green plants prepare food is called:

- a) Respiration   b) Photosynthesis   c) Fermentation   d) Digestion

Q3. Xylem is primarily responsible for:

- a) Food transport   b) Water transport   c) Storage   d) Photosynthesis

#### **M.Phil. Education**

Q1. Who is known as the father of modern education?

- a) Plato   b) John Dewey   c) Aristotle   d) Rousseau

Q2. Formative assessment is mainly used to:

- a) Assign grades   b) Evaluate teachers   c) Improve learning   d) Measure IQ

Q3. Bloom's Taxonomy is a classification of:

- a) Teaching aids   b) Curriculum types   c) Learning objectives   d) School levels

#### **M.Phil. Environmental Science**

Q1. Which gas is the major contributor to global warming?

- a) Oxygen   b) Nitrogen   c) Carbon Dioxide   d) Helium

Q2. EIA stands for:

- a) Environmental Impact Act                      b) Environmental Information Agency
- c) Environmental Impact Assessment        d) Earth Intelligence Analysis

Q3. Acid rain is mainly caused by:

- a) CO<sub>2</sub> and CH<sub>4</sub>                                      b) SO<sub>2</sub> and NO<sub>x</sub>
- c) CFCs and ozone                                d) PM 2.5 and PM 10

### **M.Phil. Management Sciences**

Q1. SWOT analysis includes:

- a) Statistics, Workload, Optimization, Trends
- b) Strengths, Weaknesses, Opportunities, Threats
- c) Sales, Workers, Output, Time
- d) Strategy, Work, Operations, Technology

Q2. Leadership style that involves employees in decision-making is:

- a) Autocratic    b) Laissez-faire    c) Democratic    d) Authoritarian

Q3. Market segmentation is based on:

- a) Age    b) Income    c) Interests    d) All of the above

### **M.Phil. Mass Communication & Media**

Q1. “Agenda-setting” is a theory related to:

- a) News framing    b) Public opinion    c) Entertainment    d) Advertising

Q2. The term “Fourth Estate” refers to:

- a) Judiciary    b) Legislature    c) Media    d) Bureaucracy

Q3. A message is decoded in the communication process by the:

- a) Sender    b) Channel    c) Receiver    d) Medium

### **M.Phil. Mathematics**

Q1. The derivative of  $\sin(x)$  is:

- a)  $\cos(x)$    b)  $-\cos(x)$    c)  $\sin(x)$    d)  $-\sin(x)$

Q2. A matrix is said to be singular if:

- a) Its determinant is zero  
b) It has no inverse  
c) Both a and b  
d) None of the above

Q3. The set of natural numbers is:

- a)  $\{0, 1, 2, 3, \dots\}$    b)  $\{1, 2, 3, \dots\}$    c)  $\{-1, 0, 1, \dots\}$    d) All integers

### **M.Phil. Physics**

Q1. Newton's second law relates:

- a) Energy and time  
b) Mass and volume  
c) Force and acceleration  
d) Speed and distance

Q2. The unit of electric current is:

- a) Volt   b) Ohm   c) Ampere   d) Watt

Q3. Which of the following is a scalar quantity?

- a) Force   b) Velocity   c) Acceleration   d) Temperature

### **M.Phil. Zoology**

Q1. Blood in vertebrates is mainly composed of:

- a) Plasma and RBCs                      b) Cytoplasm and lymph
- c) Water and glucose                      d) WBCs and hormones

Q2. DNA replication occurs in:

- a) G1 phase   b) S phase   c) G2 phase   d) M phase

Q3. The study of insects is called:

- a) Herpetology   b) Entomology   c) Mammalogy   d) Ichthyology

### **M.Phil. Food Science & Technology**

Q1. Pasteurization is used to:

- a) Freeze food                      b) Sterilize utensils
- c) Kill harmful microbes                      d) Improve taste

Q2. HACCP stands for:

- a) Hazard Analysis and Critical Control Points
- b) Health and Clean Cooking Program
- c) Human Approved Cooking Certification
- d) None of the above

Q3. Which vitamin is lost during milling of grains?

- a) Vitamin A   b) Vitamin B1 (Thiamine)   c) Vitamin C   d) Vitamin D