

CODE: 82

Booklet Serial No.

Signature Invigilator

Maulana Azad National Urdu University

Polytechnic (Lateral Entry)

Entrance Test – May 2026

Question Paper cum Answer Script

Hall Ticket No.

OMR Serial No.

Time: 2hrs

Maximum Marks: 100

INSTRUCTIONS FOR CANDIDATES

1. Candidate should write their Hall Ticket number and OMR serial number on the space provided above. Candidate should not write their Name, Hall Ticket number and OMR Serial Number at any other place.
2. This booklet contains **(36)** pages. The Candidate should check the booklet before taking the Test. In case of any discrepancy, a new booklet may be provided by the Invigilator.
3. The question booklet contains 100 Multiple Choice Questions. For each question there are four options, (A), (B), (C), (D). The candidate is required to choose the correct answer and darken the circle with blue / black ballpoint pen in the OMR sheet against the corresponding answer.
4. The candidate will get one mark for each correct answer in the OMR sheet. If the candidate does not bubble the correct answer against the corresponding question number in the OMR sheet, they will not get marks.
5. If the candidate bubbles more than one circle in OMR Sheet for any question, marks shall not be awarded for the question.
6. There are no Negative marks.
7. At the end of Entrance Test, candidates are allowed to take their question booklet.

MATHEMATICS

1. Which of the following is not an irrational number
(A) $(3 + \sqrt{7})$ (B) $(3 - \sqrt{7})$
(C) $3\sqrt{7}$ (D) $(3 + \sqrt{7})(3 - \sqrt{7})$
2. If set $A = \{0, 1, 2, 3, 4, \dots\}$ then it represents:
(A) Whole numbers (B) Integers
(C) Natural numbers (D) Fraction
3. LCM of 2,3,4,5 is:
(A) 30 (B) 40
(C) 50 (D) 60
4. For the equation $X^2 - 2X - 8 = 0$, the values of X are
(A) (2, 4) (B) (2, -4)
(C) (4, -4) (D) (-2, 4)
5. The sum of two numbers is 25 and the product is 156 then the numbers are
(A) 10, 15 (B) 11, 14
(C) 12, 13 (D) 9, 16
6. If the two sides of a right-angled triangle are 3 cm and 4 cm then hypotenuse is
(A) 12 (B) 7
(C) 0.75 (D) 5
7. A quadratic equation can have maximum_____ roots.
(A) 1 (B) 2
(C) 3 (D) 4
8. Which of the following triangles have all sides equal?
(A) Equilateral (B) Scalene
(C) Isosceles (D) Right angled

9. The perimeter of a triangle is 120 cm. If the two sides are 40 cm and 50 cm then the length of third side is:
- (A) 10 cm (B) 90 cm
(C) 60 cm (D) 30 cm
10. The perimeter of a square of side 4 cm is
- (A) 16 cm (B) 8 cm
(C) 1 cm (D) 12 cm
11. In a triangle ABC right angled at B, if $AB = 3$ cm and $BC = 4$ cm then $\sin c =$
- (A) $\frac{3}{4}$ (B) $\frac{4}{3}$
(C) $\frac{3}{5}$ (D) $\frac{4}{5}$
12. The value of $\sin^2 60^\circ + \cos^2 60^\circ =$
- (A) 0 (B) $\frac{1}{2}$
(C) 2 (D) 1
13. If $\sin 2\theta = 2\sin\theta$ then the value of θ is:
- (A) 30° (B) 60°
(C) 90° (D) 0°
14. Number of tangents of a circle are
- (A) 0 (B) ∞
(C) 1 (D) 100
15. The area of a circle with radius 7 cm is
- (A) 154 cm^2 (B) 49 cm^2
(C) 22 cm^2 (D) 70 cm^2
16. The radius of a circle is 4 cm then its diameter is:
- (A) 2 cm (B) 4 cm
(C) 16 cm (D) 8 cm

17. The perimeter of a circle with diameter 14 cm is:
(A) 44 cm (B) 28 cm
(C) 52 cm (D) 3.14 cm
18. The mean of 1,2,3,4,5,6,7 is
(A) 2 (B) 3
(C) 4 (D) 5
19. The median of 4,10,14,16,20,24 is
(A) 14 (B) 15
(C) 16 (D) 17
20. Cumulative frequency table is helpful in finding
(A) Mean (B) Mode
(C) Median (D) All of the above
21. (1,-3) lies in which quadrant.
(A) first quadrant (B) second quadrant
(C) third quadrant (D) fourth quadrant
22. $\sqrt[3]{27} =$
(A) 2 (B) 3
(C) 5 (D) 9
23. If $A = \begin{bmatrix} 5 & 2 \\ 3 & 4 \end{bmatrix}$, $B = \begin{bmatrix} 3 & 5 \\ 3 & 4 \end{bmatrix}$ then the value of $3A + 5B$ is
(A) $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$ (B) $\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$
(C) $\begin{bmatrix} 30 & 31 \\ 24 & 32 \end{bmatrix}$ (D) $\begin{bmatrix} 34 & 25 \\ 24 & 32 \end{bmatrix}$

24. If $A = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$, $B = \begin{bmatrix} 3 & 5 \\ 3 & 4 \end{bmatrix}$ then the value of $A \times B$ is
- (A) $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$ (B) $\begin{bmatrix} 3 & 5 \\ 3 & 4 \end{bmatrix}$
- (C) $\begin{bmatrix} 3 & 0 \\ 0 & 4 \end{bmatrix}$ (D) $\begin{bmatrix} 1 & 5 \\ 3 & 1 \end{bmatrix}$
25. If $A = \begin{bmatrix} 5 & 2 \\ 3 & 4 \end{bmatrix}$ then its transpose is
- (A) $\begin{bmatrix} 4 & 3 \\ 2 & 5 \end{bmatrix}$ (B) $\begin{bmatrix} 5 & 3 \\ 2 & 4 \end{bmatrix}$
- (C) $\begin{bmatrix} 5 & 3 \\ 4 & 2 \end{bmatrix}$ (D) $\begin{bmatrix} 3 & 4 \\ 5 & 2 \end{bmatrix}$
26. If cost price of an item is Rs. 300/- and selling price is Rs. 375/- then % profit is:
- (A) 75 (B) 375
- (C) 300 (D) 25
27. The n^{th} term of the series 4,7,10,13..... in A.P. is
- (A) $3n+1$ (B) n
- (C) $2n+1$ (D) $n+1$
28. 1,2,4,8.... is in :
- (A) Harmonic Progression (B) Arithmetic Progression
- (C) Geometric Progression (D) None of the above
29. If a die is rolled then what is the probability of getting number less than 4
- (A) $1/2$ (B) $1/3$
- (C) $1/4$ (D) 1
30. When a coin is tossed n times the total number of outcomes are
- (A) $2n$ (B) n^2
- (C) $n/2$ (D) 2^n

31. The distance of point A(5, 6) from the x-axis is
(A) 5 Units (B) 6 Units
(C) 1 Unit (D) 30 Units
32. The distance of the point P(-3, 4) from the origin is
(A) -3 Units (B) 4 Units
(C) 1 Unit (D) 5 Units
33. A quadratic equation $ax^2 + bx + c = 0$ has no real roots, if
(A) $b^2 - 4ac > 0$ (B) $b^2 - 4ac < 0$
(C) $b^2 - 4ac = 0$ (D) $b^2 + 4ac > 0$
34. $\sin A / \tan A =$
(A) $\cot A$ (B) $\sec A$
(C) $\operatorname{cosec} A$ (D) $\cos A$
35. If P=Principal, T=time (in years) and R = Rate of interest per year in % then S.I. is
(A) PR / T (B) $PTR / 100$
(C) $PT / 100R$ (D) $PR / 100T$
36. The slope of Y – axis is:
(A) Not defined (B) 1
(C) 100 (D) 0
37. $a^m * a^n =$
(A) a^{mn} (B) $(aa)^{mn}$
(C) a^{m+n} (D) a^{m-n}
38. The degree of $2X^3 - 5X^4$ is
(A) 2 (B) 3
(C) 4 (D) 5

39. $3x^2 + 3y^2$ is
 (A) Monomial (B) Binomial
 (C) Trinomial (D) None of the above
40. $5^4 / 25^2 =$
 (A) 1 (B) 5
 (C) 25 (D) 125

PHYSICS

41. The Unit of time is:
 (A) Light Year (B) Parsec
 (C) Leap year (D) Angstrom
42. Velocity is defined as _____ per time.
 (A) Distance (B) Displacement
 (C) Power (D) Acceleration
43. SI units of force is
 (A) Kgm (B) Newton
 (C) Newton-metre (D) Kg
44. The weight of an object on the Moon's surface is
 (A) $1/2$ of the weight on Earth (B) 6 times the weight on Earth
 (C) $1/6$ of the weight on Earth (D) $1/5$ of the weight on Earth
45. Work done is given as
 (A) $W = s / F$ (B) $W = F.s$
 (C) $W = s - F$ (D) $W = F/s$
46. If m is the mass and v is the velocity of the object then K.E. is given as
 (A) K.E. = $\frac{1}{2} mv$ (B) K.E. = $\frac{1}{2} mv^2$
 (C) K.E. = $\frac{1}{2} m^2v$ (D) K.E. = mv^2

47. What is the pressure exerted by a force of 200 N acting on an area of 4 m^2 ?
- (A) 50 N/m^2 (B) 10 N/m^2
(C) 800 N/m^2 (D) 100 N/m^2
48. Sound cannot travel in
- (A) Solid (B) Liquid
(C) Vacuum (D) Gas
49. Pitch of a note depends on
- (A) Amplitude (B) Loudness
(C) Frequency (D) waveform
50. $1 \text{ KW} =$
- (A) 1000 W (B) 100 W
(C) 10 W (D) 10000 W
51. Fuse wire should have
- (A) Low melting point (B) High melting point
(C) Very High melting point (D) None of the above
52. _____ material is used in electrical wiring as insulator
- (A) Aluminum (B) Copper
(C) Tin (D) Rubber
53. 2 resistors of 3ohms are connected in parallel. The equivalent resistance is
- (A) 3 ohms (B) 1.5 ohms
(C) 6 ohms (D) $\frac{2}{3}$ ohms
54. S.I. unit of Voltage is _____
- (A) Volt (B) Amp
(C) Volt/Sec (D) Volt Sec

55. 5 Amp current is flowing through a wire having resistance of 10 ohms then the voltage is
(A) 2 V (B) 50 V
(C) 50 A (D) 0.5 A
56. Human eye consists of
(A) Convex lens (B) Concave mirror
(C) Convex mirror (D) Concave lens
57. SI unit of electric charge is
(A) Ohm (B) Volt
(C) Coulomb (D) Ampere
58. Magnetic field can be detected by
(A) Thermometer (B) Magnetic compass
(C) Anemometer (D) Barometer
59. A temporary magnet which is due to flow of current is
(A) Magnetic Field (B) Magnet
(C) Residual magnet (D) Electro magnet
60. An example of mutual inductance is
(A) Transformer (B) Relay
(C) DC Generator (D) DC Motor
61. Radio Waves are
(A) Stationery (B) Electromagnetic
(C) Mechanical (D) Particles
62. A Device that converts Electrical energy to Mechanical energy
(A) Motor (B) Generator
(C) Transformer (D) Electroscope
63. SI unit of capacitance
(A) Ampere (B) Farad
(C) Henry (D) Volt

64. Spreading or bending of waves around a sharp edge is known as
(A) Reflection (B) Refraction
(C) Interference (D) Diffraction
65. Image formed by a convex mirror
(A) Virtual & Erect (B) Inverted & Real
(C) Erect & Real (D) Inverted & virtual
66. For a normal person audible frequency range for sound wave is
(A) 20k- 20kHz (B) 10k- 10kHz
(C) 30k- 30kHz (D) 100k- 100kHz
67. Power of lens is equal to
(A) $1/f$ (B) $2/f$
(C) $4/f$ (D) $3/f$
68. Biogas is also known as _____.
(A) Gobar gas (B) Petroleum Gas
(C) Fuel Gas (D) Liquified Natural Gas
69. What is the value of the acceleration due to gravity on the surface of the Earth?
(A) 9.8 m/s^2 (B) 8 m/s^2
(C) 1 m/s^2 (D) 98 m/s^2
70. The sum of kinetic energy and potential energy is
(A) Thermal Energy (B) Mechanical Energy
(C) Chemical Energy (D) Heat Energy

CHEMISTRY

71. Which of the following gases is used to store fat and oil-containing foods for a long time?
(A) Nitrogen (B) Carbon dioxide
(C) Neon (D) Oxygen

72. Which of the following is a noble gas?
(A) Hydrogen (B) Oxygen
(C) Helium (D) Nitrogen
73. Which of the following is a chemical reaction?
(A) Melting wax (B) Burning a candle
(C) Freezing water (D) Dissolving sugar in water
74. Which of the following is a strong acid?
(A) Hydrochloric acid (B) Citric acid
(C) Acetic acid (D) Carbonic acid
75. What is the common name of calcium oxide?
(A) Chalk (B) Slaked lime
(C) Quicklime (D) Marble
76. What is the chemical formula for hydrogen peroxide?
(A) H_2O_2 (B) H_2O
(C) HO_2 (D) HO
77. Which of these is a metal?
(A) Nitrogen (B) Oxygen
(C) Sulphur (D) Iron
78. Which of the following is a property of graphite?
(A) It does not conduct electricity
(B) It is a good conductor of electricity
(C) It is hard and brittle
(D) It is a good insulator
79. Which of the following metals is liquid at room temperature?
(A) Mercury (B) Copper
(C) Gold (D) Iron

80. What is the atomic number of an element?
- (A) The number of neutrons in the nucleus of an atom
(B) The total number of protons and neutrons in an atom
(C) The number of protons in the nucleus of an atom
(D) The number of electrons in an atom
81. An acid turns Blue litmus to -----
- (A) Black (B) red
(C) Green (D) yellow
82. What is formed when iron reacts with moist air?
- (A) Rust (B) Aluminium oxide
(C) Copper (D) Zinc
83. Which of the following is an alcohol?
- (A) Propane (B) Butane
(C) Methanol (D) Hexane
84. Which of these is an organic compound?
- (A) Sodium chloride (B) Water
(C) Calcium sulphate (D) Glucose
85. In the reaction between zinc and hydrochloric acid, what is the gas released?
- (A) Chlorine (B) Hydrogen
(C) Helium (D) Water vapour
86. Electronic configuration of Al^{+3} is
- (A) 2,0 (B) 2,8,1
(C) 2,8 (D) 2,8,3
87. Element with highest electronegativity
- (A) Fluorine (B) Chlorine
(C) Neon (D) Hydrogen

88. Bronze is made up of
(A) Cu and Zn (B) Zn and Ni
(C) Cu and Sn (D) Cu, Zn, Tn
89. During smelting, an additional substance is added which combines with impurities to form a fusible product known as:
(A) Mud (B) Slag
(C) Flux (D) Gangue
90. The Ph of a solution of HCL is 4. This shows that the molarity of the solution
(A) 0.0001M (B) 1.0M
(C) 4.0M (D) 0.004M
91. The electrolytic decomposition of water gives H_2 and O_2 in the ratio of
(A) 2:1 by volume (B) 1:1 by volume
(C) 3:2 by volume (D) 2:3 by volume
92. Which of the following is a group 1 metal
(A) Aluminium (B) Sulphur
(C) Boron (D) Potassium
93. In Modern Periodic table, elements are arranged based on their
(A) Atomic size (B) Atomic weight
(C) Atomic number (D) Atomicity
94. Which of the following is the use of oxygen
(A) Fire Extinguisher (B) Nitrogen fixation by plants
(C) Preservation of food (D) Respiration
95. Which of the following is not a physical property
(A) Melting Point (B) Reactivity
(C) Boiling Point (D) Solubility

96. Which of the Following compounds undergo sublimation
(A) Ammonium chloride (B) Sodium chloride
(C) Sulphur oxide (D) Calcium oxide
97. Atomicity of Ozone is
(A) Monoatomic (B) Polyatomic
(C) Triatomic (D) Diatomic
98. When an acid and base react what is formed?
(A) Salt and Water (B) New acid
(C) New base (D) Only water
99. Smallest element in the periodic table
(A) Hydrogen (B) Nitrogen
(C) Oxygen (D) Helium
100. The odour of Hydrogen Sulphide gas (H_2S) is
(A) Odourless (B) Rotten egg smell
(C) Sweet smell (D) Vanilla smell

Rough Work

Rough Work

Rough Work

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