

Roll No. _____ اُمیدوار خود پر کرب

(For all sessions)

Paper Code

7

1

9

2

ریاضی (سائنس گروپ) (معروضی) گروپ-II- (Objective Type) (Science Group) Mathematics

Marks: 15

Time: 20 Minutes وقت: 20 منٹ

نمبر: 15

نوٹ: تمام سوالات کے جوابات دی گئی معروضی جوابی کاپی پر لکھیں ہر سوال کے چار ممکنہ جوابات A, B, C, اور D دیئے گئے ہیں، جس جواب کو آپ درست سمجھیں، جوابی کاپی پر اس سوال نمبر کے سامنے جزو A, B, C, یا D کے دائروں میں سے متعلقہ دائرے کو مار کر یا پیلن کی سپاہی سے بھر دیں۔

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given. Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

- 1.1. The solution set of the equation $4x^2 - 16 = 0$.
 (A) $\{\pm 4\}$ (B) $\{4\}$ (C) $\{\pm 2\}$ (D) ± 2
 2. Sum of cube roots of unity is:
 (A) 0 (B) 1 (C) -1 (D) 3
 3. If α, β are the roots of $x^2 - x - 1 = 0$, then product of roots 2α and 2β is
 (A) -2 (B) 2 (C) 4 (D) -4
 4. In a proportion $a:b::c:d$, b and c are called:
 (A) means (B) extremes (C) fourth proportional (D) None
 5. The third proportion of x^2 and y^2 is:
 (A) $\frac{y^2}{x^2}$ (B) $x^2 y^2$ (C) $\frac{y^4}{x^2}$ (D) $\frac{y^2}{x^4}$
 6. Partial fraction of $\frac{x+2}{(x+1)(x^2+2)}$ are of the form.
 (A) $\frac{A}{x+1} + \frac{B}{x^2+2}$ (B) $\frac{A}{x+1} + \frac{Bx+C}{x^2+2}$ (C) $\frac{Ax+B}{x+1} + \frac{C}{x^2+2}$ (D) $\frac{A}{x+1} + \frac{Bx}{x^2+2}$
 7. A collection of well-defined objects is called:
 (A) Subset (B) Power set (C) Set (D) Super set
 8. $(A \cup B) \cup C$ is equal to:
 (A) $A \cap (B \cup C)$ (B) $(A \cup B) \cap C$ (C) $A \cup (B \cup C)$ (D) $A \cap (B \cap C)$
 9. Mean is affected by change in:
 (A) value (B) ratio (C) origin (D) rate
 10. The most frequent occurring observation in a data set is called:
 (A) Mode (B) Median (C) Harmonic mean (D) arithmetic mean
 11. $\frac{1}{1+\sin\theta} + \frac{1}{1-\sin\theta} =$
 (A) $2\sec^2\theta$ (B) $2\cos^2\theta$ (C) $\sec^2\theta$ (D) $\cos\theta$
 12. A complete circle is divided into:
 (A) 90° (B) 180° (C) 270° (D) 360°
 13. A line which has two points in common with a circle is called:
 (A) Sine of a circle (B) Cosine of a circle (C) Tangent of a circle (D) Secant of a circle
 14. The length of a chord and the radial segment of a circle are congruent, the central angle made by the chord will be:
 (A) 30° (B) 45° (C) 60° (D) 75°
 15. The tangent and the radius of a circle at the point of contact are:
 (A) parallel (B) not perpendicular (C) perpendicular (D) not parallel