S.S.C. PART-I (9TH CLASS) (SESSION 2007-09)

MATHEMATICS (GROUP-I) — ریاضی (گروپ - پہلا)

TIME ALLOWED: 20 Minutes — وقت = 20 منٹ

MAXIMUM MARKS: 15 — کل نمبر = 15

OBJECTIVE — حصہ معروضی

NOTE: - Write your Roll Number on the given space only.

Answers are to be written on this very sheet according to given instructions. Cutting, over-writing, using lead pencil, rubber or ink remover will result into loss of marks.

1\. Four possible answers are given to each statement. Encircle the correct one. 15

(i) The set with infinite number of elements is called ____ : - (a) Empty set (b) Finite set (c) Infinite set (d) Set of whole numbers

(ii) If the number of elements in set A and set B is 2, then how many binary relations will be in set A x B? (a) 2^3 (b) 2^2 (c) 2^4 (d) 2^5

(iii) If $x = \sqrt{3} + 2$ then $\frac{1}{x} =$ ____ (a) $-2-\sqrt{3}$ (b) $-\sqrt{3}+2$ (c) $-2\sqrt{3}$ (d) $2\sqrt{3}$

(iv) $(-2)^5 =$ ____ (a) 2^5 (b) -2^5 (c) 5^{-2} (d) 5^2

(v) Scientific notation of 0.00023 is ____ : - (a) 2.3×10^{-4} (b) 2.3×10^4 (c) 2.3×10^3 (d) 2.3×10^{-3}

(vi) Characteristic of log19 is ____ : - (a) 0 (b) 10 (c) 2 (d) 1

(vii) What will be added to or subtracted from $4x^2 + 25y^2$ to make it complete square? (a) 16xy (b) 12xy (c) 24xy (d) 20xy

(viii) $(x-6)(x-4) =$ ____ (a) $x^2 + 10x + 24$ (b) $x^2 - 10x - 24$ (c) $x^2 + 10x - 24$ (d) $x^2 - 10x + 24$

(ix) What will be the factorization of $x^2 + x - 6$? (a) $(x-2)(x-3)$ (b) $(x-2)(x+3)$ (c) $(x+2)(x+3)$ (d) $(x+2)(x-3)$

(x) What will be the factorization of $3x^2 - x - 2$? (a) $(x+1)(3x-2)$ (b) $(x+1)(3x+2)$ (c) $(x-1)(3x+2)$ (d) $(x-1)(3x-2)$

(xi) If $\begin{bmatrix} 2 & 3 \\ 4 & x \end{bmatrix}$ is a singular matrix, then x = ____ : - (a) 3 (b) 6 (c) 4 (d) -6

(xii) If A, B and C are three matrices and they are conformable for multiplication then (AB)C = ____ : - (a) C(AB) (b) A(BC) (c) C(BA) (d) (AC)B

(xiii) The angles of measure 50° and 130° are called as ____ angles: - (a) Complementary (b) Supplementary (c) Adjacent (d) None

(xiv) The medians of a triangle intersect in the ratio ____ : - (a) 1 : 3 (b) 1 : 2 (c) 1 : 1 (d) 2 : 1

(xv) One and only one line can pass through ____ : - (a) One point (b) Two points (c) Three points (d) Four points