



Name

1- ہر سوال کے ساتھ چار دائرے دیئے گئے ہیں، صرف صحیح جواب والا دائرہ بھر دیں۔

Roll No

2- دائروں کو شیڈ (بھرنے) کے لئے نیلے یا کالے رنگ کا مارکر استعمال کریں۔

3- جواب میں ایک سے زائد دائرے بھرنے سے جواب غلط تصور ہوگا۔

Time Allowed: 20 Minutes

## SECTION - A

Marks : 15

- 1  $(2p - q)^3 =$    $8p^3 - q^3 - 6pq(2p - q)$    $8p^3 + q^3 + 6pq(2p + q)$    $8p^3 - q^3 + 6pq(2p - q)$    $8p^3 + q^3 - 6pq(2p + q)$
- 2 The factorization of  $2lx + 2mx + 2nx$  is:   $(l + m + n)$    $2(l + m + n)$    $2x(l + m + n)$    $m(2l + 2x + 2n)$
- 3 If M and N are two polynomials and their HCF and LCM are respectively H and L then  $M =$    $\frac{H \times L}{N}$    $\frac{N}{H \times L}$    $\frac{N}{H}$    $\frac{N}{L}$
- 4 The solution of linear equation  $2t - 3 = t - 1$  is:   $-2$    $\frac{4}{3}$    $2$    $\frac{3}{4}$
- 5 If  $U = \{4, 5\}$  and  $V = \{7, 6\}$ ; then which of the given is ordered pair of  $U \times V$ ?   $\{(4, 7), (6, 5)\}$    $\{(6, 5)\}$    $\{(4, 7), (5, 6)\}$    $\{(7, 4)\}$
- 6  $P^{\frac{2}{9}}$  can be expressed in radical form as:   $\sqrt[2]{P}$    $\sqrt[9]{P}$    $\sqrt[9]{P^2}$    $\sqrt[9]{P^9}$
- 7 If  $z = -3i + 13$  then conjugate of z is:   $-3i - 13$    $3i - 13$    $3i + 13$    $-3i$
- 8  $9.62 \times 10^{-3}$  can be written in standard form as:   $962000.0$    $0.000962$    $0.00962$    $0.0000692$
- 9 Which of the given is the base of common logarithm?  m  e  10  f
- 10 Which of the given is a polynomial?   $x^2 + \frac{1}{x^2} + 2$    $x^3 + x^{-3} + 3$    $x^4 + x^3 + x^2 + 1$    $x^5 + x^3 + \frac{1}{x^2} + 1$   
(where  $x \neq 0$ ) (where  $x \neq 0$ )
- 11 Which of the given elements represent one of the columns of the matrix  $\begin{bmatrix} 12 & 6 & 3 \\ 7 & -5 & 6 \\ 11 & 7 & 9 \end{bmatrix}$    $6, -5, 7$    $7, -5, 6$    $12, -5, 9$    $12, 6, 3$
- 12 Which of the given two matrices are equal?  S and T  R and S  S and Q  R and Q  
 $Q = \begin{bmatrix} 4 & 8 \\ 11 & 7 \end{bmatrix}$   $R = \begin{bmatrix} 4 & 8 \\ 7+3 & 3+3 \end{bmatrix}$   
 $S = \begin{bmatrix} 4 & 8 \\ 8+3 & 4+3 \end{bmatrix}$   $T = \begin{bmatrix} 6+5 & 2+3 \\ 1+3 & 1+5 \end{bmatrix}$
- 13 If  $A = \begin{bmatrix} 2 & 3 \\ 6 & 4 \end{bmatrix}$  then  $A^t =$    $\begin{bmatrix} -2 & -6 \\ -3 & -4 \end{bmatrix}$    $\begin{bmatrix} 2 & 6 \\ 3 & 4 \end{bmatrix}$    $\begin{bmatrix} 4 & 3 \\ 6 & 2 \end{bmatrix}$    $\begin{bmatrix} 2 & 6 \\ 4 & 2 \end{bmatrix}$
- 14 If  $P = \begin{bmatrix} 1 & 3 \\ 4 & 5 \end{bmatrix}$  and  $Q = \begin{bmatrix} 2 & -1 \\ 6 & 13 \end{bmatrix}$  then  $P - Q$  is equal to:   $\begin{bmatrix} -1 & 4 \\ -2 & -8 \end{bmatrix}$    $\begin{bmatrix} 3 & 2 \\ 10 & 8 \end{bmatrix}$    $\begin{bmatrix} 9 & 3 \\ 24 & 65 \end{bmatrix}$    $\begin{bmatrix} -1 & 4 \\ -2 & -8 \end{bmatrix}$
- 15 The rational number  $\frac{2}{3}$  can be expressed as:   $0.666666667$    $1.6666$    $0.61661$    $16.66667$