

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	A. 15 B. 15 i C. -15 i D. -15
3	Question Image	
4	The equation of the circle with centre origin and radius r is	A. $x^2 + y^2 = 1$ B. $x^2 + y^2 = r^2$ C. $x^2 + y^2 = 0$ D. $x^2 - y^2 = r^2$
5	Question Image	
6	Question Image	A. An empty set B. Universal set C. A singleton set D. None of these
7	(x-1) is a factor of	A. $2x^3 - 3x^2 + 9$ B. $2x^3 - 5x - 8$ C. $48x^2 - 46x - 9$ D. $x^9 - 1$
8	If the line $2x - y + k = 0$ is a diameter of the circle $x^2 + y^2 + 6x - 6y + 5 = 0$ then k is equal to	A. 12 B. 9 C. 6 D. 3
9	Question Image	
10	If $\underline{u} = 2\hat{i} + p\hat{j} + 5\hat{k}$ and $\underline{v} = 3\hat{i} + \hat{j} + p\hat{k}$ are perpendicular, then p=	A. 1 B. 2 C. -1 D. -3
11	Question Image	
12	If P is a proposition then its negative is denoted by	
13	The equation of the tangent at vertex to the parabola is $y^2 = -8(x - 3)$	A. $y=0$ B. $x=3$ C. $x=1$ D. $x=5$
14	Question Image	A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property w.r.t. to addition
15	If $\text{Proj}_v u = \text{Proj}_u v$, then	A. u and v are parallel B. $ u = v $ C. u and v are perpendicular D. One of u or v
16	$x^2 + x - 6 = 0$ is	A. An equation B. An identity C. A polynomial D. None of these
17	The 31 term of the A.P 5, 2, -1.....is	A. -82 B. 82 C. 85 D. -85

18

Question Image

- A. -1
- B. 0
- C. 2
- D. 1

19

Question Image

20

Question Image