

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The point (x_1, y_1) lies outside the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ if	
2	The angle between lines $xy = 0$ is	A. 45° B. 60° C. 90° D. 180°
3	A _____ divides the plane into left and right half planes.	A. Vertical line B. Horizontal line C. Non vertical line D. Inequality
4	Question Image <input style="width: 100%; height: 20px;" type="text"/>	A. I and II quadrants B. I and III quadrants C. II and III quadrants D. II and IV quadrants
5	For the equation $ x^2 + x - 6 = 0$, the roots are	A. One and only one real number B. Real with sum one C. Real with sum zero D. Real with product zero
6	Question Image <input style="width: 100%; height: 20px;" type="text"/>	
7	Which of the following is a vector	A. length B. momentum C. volume D. speed
8	The roots of $px^2 - (p-q)x - q = 0$ are	A. equal B. Irrational C. Rational D. Imaginary
9	Question Image <input style="width: 100%; height: 20px;" type="text"/>	
10	The value of x for which the polynomials $x^2 - 1$ and $x^2 - 2x + 1$ vanish simultaneously is	A. 2 B. 1 C. -1 D. -2
11	If a particle moves according to the law $s = t^3 - t^2$, then its velocity at time $t = 1.5$ is	A. $9/2$ B. $15/4$ C. 5 D. None
12	The number of subset of $\{0\}$ is	A. 1 B. 2 C. 3 D. None
13	If distance of (a,b) from y -axis is 2 then	A. $a = 2$ B. $b = 2$ C. $a = b$ D. $a = 4$
14	Question Image <input style="width: 100%; height: 20px;" type="text"/>	
15	Arithmetic mean between 14 and 18 is	A. 16 B. 17 C. 15 D. 32
16	Question Image <input style="width: 100%; height: 20px;" type="text"/>	A. $405 / 256$ B. $504 / 259$ C. $450 / 263$ D. None
17	A circle which touches one side of a triangle externally and the other two sides produced is called	A. In-circle B. Circumcircle C. e-circle D. Point circle

18 E-radius corresponding to $\angle B$ is

19 Question Image

20 $x = \sec\theta, y = \tan\theta$ are the parametric equations of

- A. Circle
- B. Hyperbola
- C. Ellipse
- D. parabola