

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The sides of a right angled triangle are in A.P The ratio of sides is	A. 1:2:3 B. 3:4:5 C. 2:3:4 D. 5:8:3
2	The equation $(\cos p - 1)x^2 + x(\cos p) + \sin p = 0$ in the variable x, has real roots, then p can take any value in the interval	A. $(0, 2\pi)$ B. $(-\pi, \pi)$ C. $(0, \pi)$ D. None of these
3	The number of divisors of 1029, 1547 and 122 are in	A. A.P. B. G.P. C. H.P. D. None of these
4	A point (x,y) which satisfy a linear inequality in two variables form its	A. Solution B. Domain C. Range D. None
5	The general term in the expansion of $(a+x)^n$ is	A. $(r-1)$ th term B. $(r+1)$ th term C. rth term D. none
6	Which of the following is a scalar.	A. electric field B. magnetic field C. weight D. mass
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. parallel vectors B. perpendicular vectors C. concurrent vectors D. collinear vectors
8	$3/2$ is	A. An irrational number B. Whole number C. A positive integer D. A rational number
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A rational number B. An irrational number C. An odd number D. A prime number
10	Such fraction which can not be written in the form $\frac{p}{q}$ where p,q and $q \neq 0$, such fractions are called.	A. Fractinal numbers B. Rational Numbers C. Even Numbers D. Whole Numbers
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A B. 0 C. Unit vector D. None
12	A card is drawn from a pack of cards numbered 2 to 53. the probability that the number on the card is prime number less than 20 is	A. $2/13$ B. $4/13$ C. $5/13$ D. $8/13$

13 Find the geometric mean between 4 and 16

14 Question Image

15 $w^{28} + w^{38} =$ _____

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

16 $(7,9) + (3,-5) =$

- A. (4,4)
- B. (10,4)
- C. (9,-5)
- D. (7,3)

17 The value of x which is unchanged by the mapping in the function defined by $f(x) = x^2 + 5x - 5$ for $x > 0$ is

- A. 1
- B. 5
- C. -5
- D. -1

18 The set of all points in the plane that are equally distant from a fixed point is called a

- A. parabola
- B. ellipse
- C. hyperbola
- D. circle

19 Question Image

D. none of these

20 If $z_1 = \sqrt{-36}$, $z_2 = \sqrt{-25}$, $z_3 = \sqrt{-16}$ then

- A. 15
- B. $15i$
- C. $-15i$
- D. -15