

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The slope of y-axis is	A. 0 B. undefined C. 1
2	A. Forms a group w.r.t. addition B. Non commutative group w.r.t. multiplication C. Forms a group w.r.t multiplication D. Doesn't form a group	
3	A box contains 10 red 30 white and 20 black marbles When a marble is drawn at random the probability that it is either red or white is  A. 1/6 B. 1/3 C. 1/2 D. 2/3	
4	Question Image	
5	Question Image	
6	$(x + a)(x + b)(x + c)(x +) = k$ , $k \ne 0$ is reducible to quadratic form only if	A. a+b=c+d B. a+c=b+d C. a+d=b+c D. All are correct
7	If 2 and 2 are x and y components of vector then its angle with x-axis is	A. 30 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> B. 45 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> C. 60 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> D. 90 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span>
8	The set {-1, 1} is	A. Group under the multiplication     B. Group under addition     C. Does not form a group     D. Contains no identity element
9	If two balls are drawn from a bag containing 3 white, 4 black and 5 red balls. Then the probability that the drawn balls are of different colours is	A. 1 / 66 B. 3 / 66 C. 19 / 66 D. 47 / 66
10	Question Image	
11	A set having only one element is called	A. An empty set B. Universal set C. A singleton set D. A power set
12	The additive inverse of 1 is	A. 1 B1 C. 0 D. Does not exist
13	Latus rectum = 4 x	A. focal distance of the vertex B. Chord C. Focus D. 1/2
14	Question Image	A. An upper triangular matrix     B. A lower triangular matrix     C. A diagonal matrix     D. A null matrix
15	Question Image	
16	Both the roots of the equation $(x - b)(x - c) + (x - c)(x - a) + (x - a)(x - b) = 0$ are always	A. Positive B. Negative C. Real

		D. None of these
17	Question Image	A. Associative property of addition B. Associative property of multiplication C. Commutative property of addition D. Commutative property of multiplication
18	Question Image	
19	The roots of px2 - (p-q)x-q=0 are	A. equal B. Irrational C. Rational D. Imaginary
20	Question Image	