Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. direction ratios B. direction cosines C. direction angles D. none of these
2	Which of the vectors have opposite direction?	
3	The modulus of a vector $\underline{i}$-$\underline{i}$+ k is:	A. $\sqrt{3}$ B. 1 C. $\sqrt{2}$ D. ∞
4	What is the conjugate of -7 -2i?	A. -7 + 2i B. 7 + 2i C. 7 -2i D. None of these
5	Question Image	
6	Question Image	A. a sin(ax + b) + c B. - a sin(ax + b) + c
7	The 26th term of the A.P -2,-4,10,............is	A. 136 B. -136 C. 148 D. -148
8	Which of the following represents a vector	D. (x, y)
9	If line through (4,3) and (2,k) is perpendicular to y =2x +3, then k =_____	A. -1 B. 1 C. -4 D. 4
10	The are of the circle centred at (1 , 2) and passing through (4 , 6) is:	A. 10π B. 25π C. 5π D. $25/2\pi$
11	There are two middle terms in the expansion of $(a+x)^n$ if n is	A. Even +ve integer B. +ve integer C. Odd +ve integer D. All
12	Question Image	A. 0 B. -1 C. 1 D. 2
13	A square matrix A = [aij] is upper triangular when	A. $c_{ij} = 0$ B. $b_{ij} = 0$ C. $a_{ij} = 0$ for all i > j D. $d_{ij} = 0$
14	$4/\sqrt{49}$ is a	A. Irrational Number B. Prime Number C. Rational number D. Whole number
15	Question Image	
16	A joint equation of the lines through the origin and perpendicular to the lines $ax^2 +2hxy +by^2 =0$ is indentical is $ax^2 +2hxy +by^2 =0$ if	A. $h^2 = ab$ B. a + b =0 C. a = b D. a≠ b E. a = b = 0
17	A line segment whose end points lie on a circle is called	A. The secant of the circle B. The arc of the circle C. The chord of the circle D. The circumference of the circle
18	Question Image	A. 3/4 B. -3/4 C. 4/3

C. 4/3
D. -4/3

19	Question Image	
20	If 3x4 +4x3+x5is divided by x+1 , which of the following is the remainder	A. 7 B. -2 C. 6 D. 1