Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The upper 3/4 the portion of a vertical pole subtends an angle $\tan^{-1}3/5$ at a point in the horizontal plane through its foot and at a distance 40 m from the foot. A possible height of the vertical pole is	A. 20 m B. 40 m C. 60 m D. 80 m
2	Question Image	
3	A matrix in which the number of rows is equal to the number of columns is called a	A. Diagonal matrix B. Rectangular matrix C. Square matrix D. Scalar matrix
4	The value of x and y when (x + iy)2 = 5 - 4i	A. x = 2, y = -1 B. x = -2, y = 1 C. x = 2, y = -i D. x = 2, y = 2
5	The seventh term of (x3+1/x)8is	A. 71 B. -22 C. 27 D. 28
6	If |αi + (α+1)j +2k| =3 then value of α is	A. 1,2 B. -1,-2 C. 1,-2 D. -1,2
7	For any set B, BUB' is	A. Is set B B. Set B' C. Universal set D. None of these
8	In a country 55% of the male population has houses in cities while 30% have houses both in cities and in villages find the percentage of the population that has houses only in villages	A. 45 B. 30 C. 25 D. 50
9	Cos-1(x)=	A. cos x B. x C. tan-1(-x) D. Sec-1 (1/x)
10	Domain of cosec x is _____	
11	The identity element with respect to subtraction is	A. 0 B. -1 C. 0 and 1 D. None of thes
12	General solution of tan 5θ= cot $2\theta$is	
13	The distance of the points (3, 4, 5) from y-axis is	
14	The distance of the point (1.1) from the origin is	A. 0 B. 2
15	Find the next two terms of 7, 9, 12, 16,...	A. 18, 20 B. 19, 22 C. 20, 25 D. 21, 27
16	The lotus of intersection of perpendicular tangents to the parabola $y^2 = 4ax$ is:	A. Axis of the parabola B. Focal chord of the parabos C. The tangent at vertex of the parabola D. a directrix of the parabola
17	If eccentricity of ellipse becomes zero then it takes the form of	A. A parabola B. A circle C. A straight line D. None of these
		A. -B

18	The square matrix A is skew-symmetric when At=	B. -C C. -A D. -D
19	If k2x2 +2hxy- 4y2 =0 represents two perpendicular lines then	A. k = 2 B. k = ±2 C. k = -2 D. k ≠0
20	*i* is equal	A. (1 , 0) B. (0 , 1) C. (1 , 1) D. (0 , 0)