Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The square root of 2i - 20i is	A. ±(5 - 2i) B. ±(5+ 2i) C. (5 - 2i) D. None of these
2	Question Image	D. none of these
3	The eccentricity of the parabola y^2= -8x is	A. -2 B. 2 C. -1 D. 1
4	The area of circle of unit radius =	A. 0 B. 1 C. 4 D. π
5	Question Image	A. 1 B. 2 C. 3 D. None of these
6	The quadratic equation 8 sec2θ - 6 secθ +1 =0 has	A. Infinitely many roots B. Exactly two roots C. Exactly four roots D. No roots
7	Domain of sec$\theta$is	
8	The first three terms in the expansion of $(1 - x)^{-2}$are	A. 1 - 2x + 3x² B. 1 - 2x - 3x² C. 1 + 2x + 3x² D. -2 - 2x +3x²
9	The formula an = a +(n-1)d for an A.P is called	A. nth term of an A.P B. Sum of first n terms C. A,M between a and b D. None of the above
10	The law of cosines reduces to a2 +c2 =b2 for	A. α = 90° B. β = 90° C. γ = 90° D. α +β +γ =180°
11	The matrix A = [aij]mxn with m ≠n is always	A. Symmetric B. Hermition C. Skew-symmetric D. None
12	Which of the following is not a solution of system of inequalities 2x- 3y ≤6,2x +y≥ 2,x +2y≤ 8, x≥ 0,y ≥ 0	A. (1,0) B. (0,4) C. (3,0) D. (8,0)
13	x^2+ x - 6 = 0 is	A. An equation B. An identity C. A polynomial D. None of these
14	Question Image	
15	Question Image	
16	Question Image	A. 4 B. 6 C. 8 D. 10
		A. 32

17	The sum of the focal distance from any point on the ellipse 9x2 +16y2 =144 is	B. 16 C. 18 D. 8
18	A number H is said to be the H.M. between a and b if a, H, b are in	A. A.P. B. G. P. C. H. P. D. None of these
19	Question Image	
20	The equation of the circle with centre (-h, -k) and radius r is	A. (x +h)²+ (y+k)²= r² B. (x +h)²+ (y-k)²= r² C. (x -h)²+ (y+k)²= r² D. (x -h)²+ (y-k)²= r²