Mathematics ECAT Pre Engineering Chapter 18 Analytic Geometry Online Test

Sr	Questions	Answers Choice
1	The equation of the sphere thro' the origin and making intercepts a, b, c on co-ordinate axes is	A. x²+ y²+ z²+ ax + by + cz = 0 B. x²+ y²+ z²- 2ax - 2 by - 2 cz = 0 C. x²+ y²+ z²= a + b + c D. x²+ y²+ z²- ax - by - cz =0
2	The center of the sphore which passes thro' (a, 0, 0), (0, b, 0), (0, 0, c) and (0, 0, 0) is	
3	The equation of the sphere passing thro' (0, 0, 0), (a, 0, 0), (0, b, 0), (9, 0, c) is	A. x²+ y²+ z²+ 2 ax +2 by + 2cz = 0 B. x²+ y²+ z²- 2ax - 2 by - 2cz = 0 C. x²+ y²+ z²- ax - by - cz = 0 D. x²+ y²+ z²+ ax + by + cz = 0
4	Question Image	A. x-axis B. y-axis C. z-axis D. None of these
5	The intercepts of the plane 2x - 3y + 4z = 12 on the co-ordinate axes are given by	A. 2, -3, 4 B. 6, -4, -3 C. 6, -4, 3 D. 3, -2, 1.5
6	Question Image	
7	Question Image	
8	64.A point (x, y, z) moves parallel to xy plane. Which of the three variables x, y, z remain fixed?	A. z B. x C. y D. x and y
9	The foot of perpendicular from (α,β,γ) only y-axis is	A. (α , 0, 0) B. (0,β , 0) C. (0, 0, γ) D. (0, 0, 0)
10	Question Image	A. Parallel to the plane B. At right angles to the plane C. Lies in the plane D. Meet the plane obliquely
11	Question Image	A. -10 B. 10/7 C. -10/7 D. -7/10
12	Question Image	
13	The points (5, -4, 2),(4, -3, 1),(7, -6, 4),(8, -7, 5) are vertices of a	A. Square B. Parallelogram C. Rectangle

		D. Rhombus
14	The points (5, 0, 2), (2, -6, 0), (4, -9, 6) and (7, -3, 8) are vertices of a	A. Square B. Rhombus C. Rectangle D. Parallelogram
15	The equations of the line thro' the point (2, 3, -5) and equally inclined to the axis are	
16	The lines l1and l2intersect. The shortest distance between them is	A. Positive B. Negative C. Zero D. Infinity
17	The equation of the plane which bisects the line joining (2, 3, 4) and (6, 7, 8) is	A. x + y + z - 15 = 0 B. x - y + z - 15 = 0 C. x - y - z - 15 = 0 D. x + y + z + 15 = 0
18	The distance of the plane 2x - 3y + 6z + 14 = 0 from the origin is	A. 14 B. 2 C. -2 D. 11
19	The point which divides the line joining the points (2, 4, 5) and (3, 5, -4) in the ratio -2 : 3 lines on	A. ZOX plane B. XOY plane C. YOZ plane D. None of these
20	Question Image	A. 0 B. 2 C. 4/3 D. 5/3
21	The projections of a line segment on x, y, z axes are 12, 4, 3. The length and the direction cosines of the line segment are	
22	The st. lines whose direction cosines satisfy al + bm + cn = 0, fmn + gnl + hlm=0 are perpendicular if	
23	Question Image	A. (3, 1, -2) B. (3, -2, 1) C. (2, -1, 3) D. (-1, -2, -3)
24	The distance of the points (3, 4, 5) from y-axis is	
25	The direction cosines of any normal to the xy-plane are	A. <1, 0, 0> B. <0, 1, 0> C. <1, 1, 0> D. <0, 0, 1>
26	The direction cosines of a line equally inclined with co-ordinate axes are	
27	The points (5, 2, 4)(6, -1, 2) and (8, -7, k) are collinear if k is equal to	A. -2 B. 2 C. 3 D. -1
28	If l, m, n are the d.c.'s of a line, then	A. l2+ m2+ n2= 0 B. l2+ m2+ n2= 1 C. l + m + n = 1 D. l = m = n = 1
29	Question Image	A. 0 D. undefined
30	Question Image	A. 9 B. -9 C. 0 D. 1