

ECAT Mathematics Chapter 20 Analytic Geometry Online Test

Sr	Questions	Answers Choice
1	If A(a,b) lies on 3x +2y =13 and point B(b,a) lies on x-y =5 then equation of AB is	A. x- y= 5 B. x+ y+ =5 C. x+ y= -5 D. 5x+5y =21
2	If line through (4,3) and (2,k) is perpendicular to y =2x +3, then k =	A1 B. 1 C4 D. 4
3	If k2x2 +2hxy- 4y2 =0 represents two perpendicular lines then	A. k = 2 B. k = ±2 C. k = -2 D. k ≠0
4	The measure of the acute angle between the lines represented by x2 -xy -6y2 =0 is	A. 120° B. 30° C. 130° D. 45°
5	The exterior angle of the interior angle C of he quadrilateral whose vertices are A(5,2),B(-2,3),C(-3,-4),D(4,-5) is	A. 30° B. 60° C. 45° D. 90°
6	The points A(+1,-1),B(3,0),C(3,7),D(1,8) are vertices of	A. Square B. Parallelogram C. Rectangle D. Trapezium
7	Area of the triangle whose vertices are (2,3),(0,1),(0,0) is	A. 6 B. 2 C. 4 D. 1
8	The equation of the line perpendicular to x- axis and passing through (-5,3) is	A. y -3 =0 B. x+ 3 =0 C. y- 3 =∞ D. x+5 =0
9	The point P $(5,8)$ and the origin lie on the side of the line $3x+7y+15=0$	A. Same side B. P above and origin below C. Opposite side D. P below and origin above
10	The points A(3,1),B(-2,-3),C(2,2) are vertices of an (an)	A. Right triangle B. Equilateral triangle C. Isosceles triangle D. Scalene triangle
11	The line through the intersection of the lines $x+2y+3=0:3x+4y+7=0$ and making equal intercepts on the axes is	A. x+ y+ 1= 0 B. x+ y- 2= 0 C. x+ y+ 2= 0 D. 2x +y +2 =0
12	The straight lines represented by the equation ax2+ 2hxy +by2 =0 intersects at	A. (1,1) B. (0,1) C. (1,0) D. (0,0)
13	The line I is horizontal if	A. m is undefined B. m=0 C. m=1 D. m=0-1
14	The coordinates of a point P(x,y) referred to XY-system are	A. (x+y,y+k) B. (x-h,y-k) C. (x,y) D. (x-h,y-k)
15	The point of concurrency of the medians of the ΔABC is called its	A. Orthocenter B. Centriod C. Circumcentre D. Incentre

17	16	If the lines 2x-3y-1=0,3x-y-5=0 and 3x+py+8=0 meet at a unique point then	A. p = -14 B. p = -1 C. p =0 D. p=12
18 Area bounded between the curve xy=2 and the lines x=1 and x=2 B. In 1/2 square units C. C. As square units C. C. As square units D. Square units	17	If the points (a,2b):(c,a+b):(2c-a,h) lie on the same line then	B. h=a+b C. h=ab
2	18	Area bounded between the curve xy=2 and the lines x=1 and x=2	B. In√2 square unitsC. In4 square units
A x sup > 2 A x sup > 2	19		z ² + ax + by + cz = 0 B. x ² + y ² + z ² - 2ax - 2 by - 2 cz = 0 C. x ² + y ² + z ² = a + b + c D. x ² + y ² +
21 The equation of the sphere passing thro' (0, 0, 0), (a, 0, 0), (b, 0), (g, 0, c) is	20	The center of the sphore which passes thro' (a, 0, 0), (0, b, 0), (0, 0, c) and (0, 0, 0) is	
22 Question Image B, y-axis	21	The equation of the sphere passing thro' (0, 0, 0), (a, 0, 0), (0, b, 0), (9, 0, c) is	z ² + 2 ax +2 by + 2cz = 0 B. x ² + y ² + z ² - 2ax - 2 by - 2cz = 0 C. x ² + y ² + z ² - ax - by - cz = 0 D. x ² + y ² +
The intercepts of the plane 2x-3y+4z = 12 on the co-ordinate axes are given by Characteristics and the plane 2x-3y+4z = 12 on the co-ordinate axes are given by Characteristics and a plane and a plane axes are given by Question Image 26 Question Image 27 Question Image 28 A z B x B x C C y D x and y A (sspan style="font-family: Aquot; Times New Roman" font-size: 24px color: rgb(34, 34, 34): text-align: center background-color: rgb(255, 255, 248);"><\pre> ¬\sqrt{n} \sqrt{n} n	22	Question Image	B. y-axis C. z-axis
26 G4.A point (x, y, z) moves parallel to xy plane. Which of the three variables x, y, z remain fixed? 27 The foot of perpendicular from (α.β.) only y-axis is 28 Question Image 29 Question Image A z B, x C, y D. x and y A (<ip>√span-y, 0, 0) B. (0, <ip>√span-y, 0) C. (0, 0, <ip>√span-y, 0) C. (0, 0, <ip>√span-y, 0) C. (0, 0, o, span style="font-family: " Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248); "><ip>√span-y, 0) C. (0, 0, o, span style="font-family: " Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248); "><ip>√span-y, 0) C. (0, 0, o, span style="font-family: " Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248); ">< C. (0, 0, o, span style="font-family: " font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248); ">< C. (0, 0, o, span style="font-family: " font-size: 24px; color: rgb(255, 255, 248); ">< C. (0, 0, o, span style="font-family: " font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248); ">< C. (0, 0, o, span style="font-family: " font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255</ip></ip></ip></ip></ip></ip>	23	The intercepts of the plane $2x - 3y + 4z = 12$ on the co-ordinate axes are given by	B. 6, -4, -3 C. 6, -4, 3
A Z B. X C. y D. x and y			
8. x C. y D. x and y A. (<ispan>, 0, 0) B. (0, span style="font-family: ":Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 249); "><ispan>, 0) C. (0, 0, span style="font-family: ":Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224); "><ispan>, 0) C. (0, 0, span style="font-family: ":Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224); "><ispan>) D. (0, 0, 0) C. (0, 0, span style="font-family: ":Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224); "><ispan>) D. (0, 0, 0) C. (0, 0, span style="font-family: ":Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224); "><ispan>) D. (0, 0, 0) C. (0, 0, span style="font-family: ":Times New Roman" font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224); "><ispan>) D. (0, 0, 0) C. (0, 0, 0) C.</ispan></ispan></ispan></ispan></ispan></ispan></ispan>	24	Question Image	
27 The foot of perpendicular from (α, β, γ) only y-axis is 28 Question Image 29 Question Image Requorts from the foot of perpendicular from the foot of the			
28 Question Image B. At right angles to the plane C. Lies in the plane D. Meet the plane obliquely A10 B. 10/7 C10/7 D7/10	25	Question Image 64.A point (x, y, z) moves parallel to xy plane. Which of the three variables x, y, z remain	B. x C. y
29 Question Image B. 10/7 C10/7 D7/10	25 26	Question Image 64.A point (x, y, z) moves parallel to xy plane. Which of the three variables x, y, z remain fixed?	B. x C. y D. x and y A. (<i>α</i> , 0, 0) B. (0, <i>ps(255, 255, 248);"><i>ps(255, 255, 224);"><i>ps(255, 255, 224);"><i>ps(255, 255, 224);"><i>ps(255, 255, 224);"><i>ps(255, 255, 224);"><i>ps(255, 255, 224);"><i>ps(255, 255, 224);"><i span="">)</i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i>
30 Question Image	252627	Question Image 64.A point (x, y, z) moves parallel to xy plane. Which of the three variables x, y, z remain fixed? The foot of perpendicular from (α, β, γ) only y-axis is	B. x C. y D. x and y A. (<i>α</i> , 0, 0) B. (0, <i>β</i> , 0) C. (0, 0, <i>γ</i>) D. (0, 0, 0) A. Parallel to the plane B. At right angles to the plane C. Lies in the plane
	25262728	Question Image 64.A point (x, y, z) moves parallel to xy plane. Which of the three variables x, y, z remain fixed? The foot of perpendicular from (α,β,γ) only y-axis is	B. x C. y D. x and y A. (<i>α</i> , 0, 0) B. (0, <i>β</i> , 0) C. (0, 0, <i>p(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224);"><i>p(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224);"><i>p(0, 0, 0, 0) A. Parallel to the plane B. At right angles to the plane C. Lies in the plane D. Meet the plane obliquely A10 B. 10/7 C10/7</i></i></i>