

FSC Part 2 Mathematics Full Book Online Test

Sr	Questions	Answers Choice
1	The line l is horizontal if and only if slope is equal to:	A. 0 B. 1 C. 2 D. undefined
2	A circle is of radius 5 cm, the distance of a chord 8 cm long from its center is:	A. 4 cm B. 3cm C. 2.5cm D. 3.4cm
3	Inclination of X-axis or of any line parallel to X-axis is:	A. Zero D. Undefined
4	y - ordinate of the centroid of triangle with vertices A(-2, 3) B(-4, 1), C(3, 2) is:	A. 3 B. 1 C. 2 D. 0
5	The general solution of differential equation of order n contains n arbitrary constants, which can be determined by ----- initial value conditions.	A. 1 B. 0 C. 2 D. n
6	If r is the radius of any circle and C its center, then any point P(x ₁ , y ₁) lies outside the circle only if:	A. CP < r B. CP = r C. CP > r D. None of these
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. x = a B. x = 2 C. x = 0 D. None
8	If y is an image of x under the function f, we denote it by:	A. x = f(y) B. x = y C. y = f(x) D. f(x, y) = c
9	If the directed distances AP and PB have same signs, then their ratio is positive and P is said to divide AB:	A. Internally B. May be divide C. Externally D. None of these
10	Length of tangent from (0,1) to $x^2 + y^2 + 6x - 3y + 3 = 0$	A. 2 B. 1 C. 4 D. 3
11	The distance of any point P (x, y) from the origin O(0 , 0) is given by:	
12	The line x = a is on the right of y - axis if:	A. a > 0 B. a < 0 C. a = 0
13	Two non parallel lines intersect each other at:	A. 1 point B. 2 points C. 3 points D. 4 points
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 2 C. 3 D. 1
15	The condition for the line y = mx + c to be a tangent to the circle $x^2 + y^2 = a^2$ is c = _____:	
16	If (2, 1) is the mid point of the line segment joining the points (2, x) & (2, -5) then x =	A. 1 B. 2 C. 7 D. -7
17	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. sinh x B. cosh x C. -sinh x

D. $-\cosh x$

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The equation of a straight line which parallel to the line $3x - 2y + 5 = 0$ and passes through $(2, -1)$ is:

- A. $3x + 2y - 8 = 0$
- B. $3x - 2y + 8 = 0$
- C. $3x - 2y - 8 = 0$
- D. $3x + 2y + 8 = 0$

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The centroid of the triangle whose vertices are $(3, -5)$, $(-7, 4)$ and $(10, -2)$ is:

- A. $(-2, -2)$
- B. $(-2, 2)$
- C. $(2, -1)$
- D. $(0, 0)$

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The conic is an ellipse, if:

- A. $e = 1$
- B. $e > 1$
- C. $0 < e < 1$
- D. $e = 0$