






ICS Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	$i.(j.k) =$	A. Meaningless B. -1 C. 1 D. 2
2	If $y = x^2 + 1$ _____ x changes from 3 to 3.02 then $dy =$ _____	A. 0.1204 B. .12 C. .02 D. 1.2
3	If a function f is from a set X to a set Y, then set X is called the _____ of f:	A. Domain B. Range C. Co-domain D. None of these
4	The center of circle $(x+3)^2 + (y-2)^2 = 16$ equals:	A. (-3, 2) B. (3, -2) C. (3, 2) D. (-3, -2)
5		A. 3 B. 4 C. 5 D. 6
6	The area A of a circle as a function of its circumference C is:	
7	If $y = f(x)$, then the variable x is called ----- variable of a function f.	A. Dependent B. Independent C. Image of y D. None of these
8	If the line l is parallel to y-axis, then the slope of l is -----.	A. 0 B. 1 C. -1 D. undefined
9		A. a B. b C. c D. a + b
10		A. Integration B. Integration w.r.t.x. C. Differentiation D. Differentiation w.r.t.x
11		A. Unit Vector B. Null vector C. Position vector D. None of these
12	The condition for the line $y = mx + c$ to be a tangent to the circle $x^2 + y^2 = a^2$ is $c =$ _____:	
13	The distance of any point P (x, y) from the origin O(0, 0) is given by:	
14	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. $3x + 2y + 8 = 0$
15	If s is the distance traveled by a body at time t, the velocity is given by the expression:	
16	The axis of the parabola $x^2 = -4ay$ is:	A. $x = a$ B. $x = 0$ C. $y = a$ D. $y = 0$
17	If the focus lies on the y - axis with coordinates F(0, a) and directrix of the parabola is $y = -a$, then the equation of parabola is:	A. $x^2 = 4ay$ B. $-x^2 = 4ay$ C. $-y^2 = 4ax$ D. $y^2 = 4ax$

18 If $y = f(u)$ and $u = F(x)$, then:

- A. 4 cm
- B. 3cm
- C. 2.5cm
- D. 3.4cm

19 A circle is of radius 5 cm, the distance of a chord 8 cm long from its center is:

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- A. $e^{-x} \sin x + c$
- B. $-e^{-x} \sin x + c$
- C. $e^{-x} \cos x + c$
- D. $-e^{-x} \sin x + c$