

ICS Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	If the equation of the parabola is $y^2 = 4ax$, then opening of the parabola is to the right of the:	A. x-axis B. y = x C. y-axis D. $x + y = 0$
2	The conic is an ellipse, if:	A. $e = 1$ B. $e > 1$ C. $0 < e < 1$ D. $e = 0$
3	If $y = \sin x$ then $dy =$	A. $\cos y \, dx$ B. $\cos x$ C. $\cos x \, dx$ D. $\cos x \, dy$
4	Joint equation of $y + 2x = 0$, $y - 3x = 0$ is:	A. $(y+2x)(y-3x) = 0$ B. $(y-2x)(y-3x) = 0$ C. $(y+2x)(y+3x) = 0$ D. $(y-2x)(y+3x) = 0$
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0
6	The vertex of the parabola $y^2 = 4ax$ is:	A. $(-a, 0)$ B. $(a, 0)$ C. $(0, -a)$ D. $(0, 0)$
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $\operatorname{sech} x \tanh x$ B. $-\operatorname{sech}^2 x$ C. $-\operatorname{sech} x \tanh x$ D. $\operatorname{sech}^2 x$
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Unit Vector B. Null vector C. Position vector D. None of these
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. -1 C. 1 D. 2
10	The radius of point circle is:	A. 0 B. $(0, 0)$ C. r D. 1
11	A quadrilateral having two parallels and two non-parallel sides is called:	A. Trapezium B. Rectangle C. Rhombus D. None of these
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. 2 C. 3 D. 4
13	The perpendicular distance of the line $3x + 4y + 10 = 0$ from the origin is:	A. 0 B. 1 C. 2 D. 3
14	The function $f(x) = 3x^2$ has minimum value at :	A. $x = 3$ B. $x = 2$ C. $x = 1$ D. $x = 0$
15	If $y = x^2 + 1$ _____ x changes from 3 to 3.02 then $dy =$ _____	A. 0.1204 B. .12 C. .02 D. 1.2
16	If the cutting plane is slightly tilted and cuts only one nappe of the cone, then the section is a / an:	A. Ellipse B. Circular cone C. Circle

D. Point circle

17 Area between x-axis and the curve:

- A. 32
- D. 16

18 Question Image

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

19 Question Image

20 The focus of the parabola $x^2 = -4ay$ is:

- A. $(-a, 0)$
- B. $(0, a)$
- C. $(0, -a)$
- D. $(a, 0)$