

## ICS Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	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
2	Question Image	A. Integration by parts B. Definite integral C. Differentiation D. None of these
3	Question Image	A. Constant B. Implicit C. Identity D. Inverse
4	Point of intersection of $x + y = 5$ & $x - y = 3$ is:	A. (5, 5) B. (4, 2) C. (4, 1) D. (1, 4)
5	If s is the distance traveled by a body at time t, the velocity is given by the expression:	
6	The number e denotes the _____ of the conic:	A. Directrix B. Vertex C. Focus D. Eccentricity
7	The symbol $\parallel$ is used for:	A. Parallel lines B. Perpendicular lines C. Non-parallel lines D. None of these
8	If the graph of f is entirely below the x-axis, then the definite integral is:	A. Positive B. Positive or negative C. Negative D. Positive and negative
9	Question Image	A. 0 B. 1 C. 2 D. 4
10	Let $f(x) = x^2 + 3$ , then domain of f is:	A. Set of all integers B. Set of natural numbers C. Set of real numbers D. Set of rational numbers
11	Question Image	A. 0 B. 2 C. 3 D. 1
12	Equation of axis of the parabola $x^2 = 4ay$ is:	A. $x = 0$ B. $x = a$ C. $y = 0$ D. $y = a$
13	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
14	Question Image	A. $e^{\sup}ax^{\sup}$ B. $f(x)$ C. $e^{\sup}ax^{\sup}f(x)$ D. $e^{\sup}ax + f(x)^{\sup}$
15	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
16	X-coordinate of any point on Y-axis:	A. 0 B. x C. y

D. 1

17

The order (or sense) of an inequality is changed by \_\_\_\_\_, if each side by a negative constant.

- A. Adding
- B. Subtracting
- C. Dividing
- D. None of these

18

The cross product or vector product of two vectors is defined:

- A. Only in plane
- B. Only in space
- C. Both a and b
- D. None of these

19

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

- A.  $x = a$
- B.  $x = 0$
- C.  $y = a$
- D.  $y = 0$

20

Question Image

- A.  $\ln |\sec x + \tan x| + c$
- B.  $\ln |\operatorname{cosec} x - \cot x| + c$
- C.  $\ln |\sec x - \tan x| + c$
- D.  $\ln |\operatorname{cosec} x + \cot x| + c$