

## ICS Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	Question Image	A. $\sinh x$ B. $\cosh x$ C. $-\sinh x$ D. $-\cosh x$
2	Question Image	A. $R$ B. $R - \{2\}$ C. $R - \{2, -2\}$ D. $R - \{-2\}$
3	If a variable $y$ depends on a variable $x$ in such a way that each value of $x$ determines exactly one value of $y$ , then $y$ is a _____ of $x$ .	A. Independent variable B. Not function C. Function D. None of these
4	Question Image	A. $\operatorname{sech} x \tanh x$ B. $-\operatorname{sech}^2 x$ C. $-\operatorname{sech} x \tanh x$ D. $\operatorname{sech}^2 x$
5	If the upper limit is a constant and the lower limit is a variable, then the integral is a function of:	A. $x$ B. $y$ C. lower limit D. upper limit
6	Question Image	A. Parallel lines B. Non-parallel lines C. Perpendicular lines D. Coplanar lines
7	The instantaneous rate of change of $y$ with respect to $x$ is given by:	
8	Question Image	A. $-\operatorname{cosec} x \cot x$ B. $\operatorname{cosec}^2 x$ C. $-\operatorname{cosec}^2 x$ D. $\operatorname{cosec} x \cot x$
9	The centroid of a triangle is a point that divides each median in the ratio:	A. 2 : 1 B. 2 : 3 C. 1 : 3 D. 4 : 3
10	The curves obtained by cutting a _____ double right circular cone by a _____ are called conics:	A. Straight line B. Plane C. Curve D. None of these
11	Zero vector is perpendicular to:	A. Every vector B. Unit vector only C. Position vector only D. Not any vector
12	Question Image	A. integration by parts B. definite integral C. Differentiation D. None of these
13	Question Image	A. $f(x^2 + 1)$ B. $f(x)$ D. $f(x^2)$
14	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)
15	Question Image	A. 4 B. Does not exist
16	The opening of the parabola $y^2 = -4ax$ is to the left of the:	A. x-axis B. $x = 1$ C. y-axis D. $x = 0$

17 The set of all points in the plane that are equally distant from a fixed point is called a / an:

- A. Circle
- B. Circular cone
- C. Ellipse
- D. Point circle

18 Question Image

19 If a point lies inside a circle, then its distance from the center is:

- A. Equal to the radius
- B. Less then the radius
- C. Greater then the radius
- D. Equal to or greater than the

20 Question Image

- A.  $x = a$
- B. for all  $x$
- D.  $x = 0$