

Ics Part 2 Mathematics Chapter 6 Test Online

Sr	Questions	Answers Choice
1	In equation of circle, coefficient of each of x^2 and y^2 are:	A. Not equal B. Opposite in signs C. Equal D. None of these
2	The focus of the parabola $x^2 = -4ay$ is:	A. $(-a, 0)$ B. $(0, a)$ C. $(0, -a)$ D. $(a, 0)$
3	Length of tangent from $(0, 1)$ to $x^2 + y^2 + 6x - 3y + 3 = 0$	A. 2 B. 1 C. 4 D. 3
4	The conic is an ellipse, if:	A. $e = 1$ B. $e > 1$ C. $0 < e < 1$ D. $e = 0$
5	Two real and distinct tangents can be drawn to a circle from any point $P(x_1, y_1)$ _____ the circle:	A. Inside B. On C. Outside D. None of these
6	The center of circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is:	A. $(-g, -f)$ B. $(-f, -g)$ C. $(0, 0)$ D. (g, f)
7	A line through a point say P perpendicular to the tangent to the curve at P is called:	A. Straight line B. Tangent line C. Normal line D. None of these
8	The radius of circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is:	
9	The vertex of the parabola $y^2 = -4ax$ is:	A. $(-a, 0)$ B. $(a, 0)$ C. $(0, -a)$ D. $(0, 0)$
10	An angle in a semi-circle is:	A. 0° B. 90° C. 180° D. 60°
11	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. $y^2 = 4ax$
12	<div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">Question Image</div>	A. Circle B. Parabola C. Hyperbola D. Ellipse
13	<div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">Question Image</div>	A. $4a$ B. $2a$ C. $4b$ D. $2b$
14	The radius of circle $x^2 + y^2 + ax + by + c = 0$ is:	D. None
15	The graph of the the parabola $x^2 = 4ay$ lies in quadrant:	A. I and II B. III and IV C. II and III D. I and III
16	If r is the radius of any circle and C its center, then any point $P(x_1, y_1)$ lies on the circle only if:	A. $ CP > r$ B. $ CP > r$ C. $ CP = r$ D. None of these

- 17 If the equation of the parabola is $y^2 = -4ax$, then opening of the parabola is to the _____ of the y-axis:
- A. Left
B. Upward
C. Right
D. Downward
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- 18 Two circles of radius 3 cm and 4 cm touch each other externally. The distance between their centers is:
- A. 1 cm
B. 7cm
C. 4cm
D. 5cm
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- 19 The graph of the parabola $y^2 = -4ax$ is symmetric about:
- A. x-axis
B. $y = x$
C. y-axis
D. None of these
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- 20 The length of the latus rectum of the parabola $y^2 = 4ax$ is:
- A. a
B. 4a
C. 2a
D. None of these