

## Ics Part 2 Mathematics Chapter 6 Test Online

Sr	Questions	Answers Choice
1	The axis of the parabola $x^2 = 4ay$ is:	A. $x = 0$ B. $x = -a$ C. $y = 0$ D. $y = -a$
2	Two imaginary 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
3	The opening of the parabola $y^2 = -4ax$ is to the left of the:	A. x-axis B. $x = 1$ C. y-axis D. $x = 0$
4	The radius of point circle is:	A. 0 B. $(0, 0)$ C. $r$ D. 1
5	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
6	Perpendicular dropped from the center of a circle on a chord _____ the chord:	A. Normal B. Bisects C. Equal to D. None of these
7	The axis of the parabola $y^2 = -4ax$ is:	A. $x = a$ B. $x = 0$ C. $y = a$ D. $y = 0$
8	In the case of rotation of axes which formula is true:	
9	If the cone is cut by a plane perpendicular to the axis of the cone, then the section is a / an:	A. Parabola B. Circular cone C. Ellipse D. Circle
10	Length of tangent from $(0,1)$ to $x^2 + y^2 + 6x - 3y + 3 = 0$	A. 2 B. 1 C. 4 D. 3
11	An angle in a semi-circle is:	A. $0^\circ$ B. $90^\circ$ C. $180^\circ$ D. $60^\circ$
12	Point $(5, 6)$ lies .... the circle $x^2 + y^2 = 81$ :	A. Outside B. Inside C. On D. None of these
13	The equation $x^2 + y^2 + 2x + 3y = 10$ represents a:	A. A pair of lines B. Circle C. Ellipse D. Hyperbola
14	The center of circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is:	A. $(-g, -f)$ B. $(-f, -g)$ C. $(0, 0)$ D. $(g, f)$
15	If $r$ is the radius of the circle and its center is at origin, then equation of circle is:	A. $x^{sup>2} + y^{sup>2} = a^{sup>2}$ B. $x^{sup>2} + y^{sup>2} = r^{sup>2}$ C. $x^{sup>2} - y^{sup>2} = a^{sup>2}$ D. $x^{sup>2} - y^{sup>2} = r^{sup>2}$

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16 The opening of the parabola  $x^2 = 16y$  is to \_\_\_\_\_ of the x-axis:

A. Left  
B. Upward  
C. Right  
D. Downward

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17 The focus of the parabola  $y^2 = -4ax$  is:

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

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18 A line segment joining two distinct points on a parabola is called a \_\_\_\_\_ of the parabola:

A. Chord  
B. Vertex  
C. Focus  
D. Directrix

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19 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.  $x^{sup>2} = 4ay$   
B.  $-x^{sup>2} = 4ay$   
C.  $-y^{sup>2} = 4ax$   
D.  $y^{sup>2} = 4ax$

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20 The number  $e$  denotes the \_\_\_\_\_ of the conic:

A. Directrix  
B. Vertex  
C. Focus  
D. Eccentricity

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