Ics Part 2 Mathematics Chapter 6 Test Online

Sr	Questions	Answers Choice
1	The graph of the parabola $x^2 = -4ay$ is symmetric about:	A. x-axis B. major axis C. y-axis D. minor axis
2	Question Image	B. 0 C. 4 D. 7
3	The conic is an ellipse, if:	A. e = 1 B. e > 1 C. 0 < e < 1 D. e = 0
4	The number e denotes the _____ of the conic:	A. Directrix B. Vertex C. Focus D. Eccentricity
5	If the radius of a circle is zero, then the circle is called a / an:	A. Circle B. Circular cone C. Ellipse D. Point circle
6	Measure of the central angle of a minor arc is ____ the measure of the angle subtended in the corresponding major arc.	A. Equal B. Double C. Not equal to D. Triple
7	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
8	The axis of the parabola $y^2 = -4ax$ is:	A. x = a B. x = 0 C. y = a D. y = 0
9	A line perpendicular to a radial chord of a circle at the end-point (which lies on the circle) is a:	A. Secant B. Diameter C. Chord D. Tangent
10	Equation of axis of the parabola $x^2 = 4ay$ is:	A. x = 0 B. x = a C. y = 0 D. y = a
11	The radius of circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is:	
12	A chord containing the center of the circle is called _____ of the circle:	A. Diameter B. Chord C. Radius D. None of these
13	The equi. of latus-rectum of the parabola $y^2 = -4ax$ is:	A. x = a B. x = -a C. y = a D. y = -a
14	The condition for the line y = mx + c to be a tangent to the circle $x^2 + y^2 = a^2$ is c = _____:	
15	A line segment whose end points lie on the circle is called a _____ of the circle.	A. Radius B. Chord C. Diameter D. None of these
16	If the equation of the parabola is $x^2 = 4ay$, then opening of the parabola is to _____ of the x-axis:	A. Left B. Upward C. Right D. Downward

17	The vertex of the parabola $y^2 = 4ax$ is:	A. (-a, 0) B. (a, 0) C. (0, -a) D. (0, 0)
18	Length of tangent from (0,1) to $x^2 + y^2 + 6x - 3y + 3 = 0$	A. 2 B. 1 C. 4 D. 3
19	The equ. of directrix of the parabola $y^2 = -4ax$ is:	A. x = a B. x = - a C. y = a D. y = -a
20	The radius of point circle is:	A. 0 B. (0, 0) C. r D. 1
21	If a circle and a line intersect in two points, then the line is called:	A. A chord B. A secant C. A diameter D. None of these
22	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
23	The graph of the parabola $y^2 = -4ax$ lies in quadrants:	A. I and II B. III and IV C. II and III D. I and III
24	In the case of rotation of axes which formula is true:	
25	The parabola $y^2 = 4ax$ lies in quadrants:	A. I and II B. III and IV C. II and III D. I and IV
26	The two parts of a right circular cones are called:	A. Nappes B. Apex of the cone C. Generator D. Vertex
27	The opening of the parabola $x^2 = 4ay$ is upward of the:	A. x -axis B. y = c C. y - axis D. x = y
28	Two arcs of two different circles are congruent if:	A. The circles are congruent B. The corresponding central angles are congruent C. Both a and b D. None of the above
29	the focal chord perpendicular to the axis of the parabola is called _____ of the parabola:	A. Directrix B. Latus rectum C. Focus D. Focal chord
30	The vertex of the parabola $x^2 = -4ay$ is:	A. (a, 0) B. (0, 0) C. (0, -a) D. (0, a)
31	The axis of the parabola $x^2 = -4ay$ is:	A. x = a B. x = 0 C. y = a D. y = 0
32	The point of a parabola which is closest to the focus in the:	A. Directrix B. Vertex C. Focus D. Chord
33	The equation $x^2 + y^2 + 2x + 3y = 10$ represents a:	A. A pair of lines B. Circle C. Ellipse D. Hyperbola
34	If the cutting plane is slightly tillted and cuts only one nappe of the cone, then the section is a / an:	A. Ellipse B. Circular cone C. Circle D. Point circle
		A. Directrix

35	A chord passing through the focus of a parabola is called a _____ of the parabola:	B. Latus rectum C. Focus D. Focal chord
36	Question Image	A. Ellipse B. Parabola C. Hyperbola D. Circle
37	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
38	The vertex of parabola $(x - 1)^2 = 8 (y + 2)$ is:	A. (1, -2) B. (0, 1) C. (-1, -2) D. (1, 2)
39	The number e denotes the _____ of the conic:	A. Directrix B. Vertex C. Focus D. Eccentricity
40	The directrix of the parabola $x^2 = 4ay$ is:	A. x = a B. x = -a C. y = a D. y = -a
41	Question Image	
42	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
43	The radius of circle $x^2 + y^2 + ax + by + c = 0$ is:	D. None
44	The graph of the parabola $x^2 = -4ay$ lies in quadrants:	A. I and II B. III and IV C. II and III D. I and III
45	The focus of the parabola $x^2 = 4ay$:	A. (0, a) B. (-a , 0) C. (0, -a) D. (a, 0)
46	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
47	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
48	Perpendicular dropped from the center of a circle on a chord _____ the chord:	A. Normal B. Bisects C. Equal to D. None of these
49	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
50	Question Image	A. 4a B. 2a C. 4b D. 2b
51	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
52	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
53	The directrix of the parabola $x^2 = -4ay$ is:	A. x = a B. x = -a C. y = a D. y = -a
		A. x = 0

54	The axis of the parabola $y^2 = 4ax$ is:	A. x = 0 B. x = a C. y = 0 D. y = a
55	A line that touches the curve without cutting through it is called:	A. Straight line B. Tangent line C. Normal line D. Vertical line
56	The focus of the parabola $y^2=-4ax$ is:	A. (-a , 0) B. (0, a) C. (0, -a) D. (a, 0)
57	The graph of the parabola $y^2 = -4ax$ is symmetric about:	A. x-axis B. major axis C. y-axis D. minor axis
58	The vertex of the parabola $y^2 = -4ax$ is:	A. (-a, 0) B. (a, 0) C. (0, -a) D. (0, 0)
59	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
60	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)
61	Question Image	A. Circle B. Parabola C. Hyperbola D. Ellipse
62	The point where the axis meets the parabola is called _____ of the parabola:	A. Directrix B. Vertex C. Focus D. Eccentricity
63	The conic is a parabola, if:	A. e = 1 B. e > 1 C. 0 < e < 1 D. e = 0
64	The graph of the parabola $y^2= -4ax$ is symmetric about:	A. x-axis B. y = x C. y-axis D. None of these
65	In the case of translation of axes which formula is true:	A. x = X - h B. x = X + h C. x + X = h D. None
66	If r is the radius of any circle and C its center, then any point $P(x_1, y_1)$ lies outside the circle only if:	A. |CP| < r B. |CP| = r C. |CP| > r D. None of these
67	The center of circle $(x+3)^2 + (y-2)^2 = 16$ equals:	A. (-3, 2) B. (3, -2) C. (3, 2) D. (-3, -2)
68	The opening of the parabola $y^2 = 4ax$ is to the _____ of the:	A. Left B. Upward C. Right D. Downward
69	Question Image	A. x = 0 B. y = -a C. y = 0 D. y = -a
70	The fixed point of the conic is called:	A. Directrix B. Vertex C. Focus D. None of these
71	One of the angles of a triangle inscribed in a circle is of 40°. If one of its' the diameter, the other angles have the measures:	A. 30°, 110° B. 40°, 100° C. 50°, 90° D. 20°, 120°

72	If the equation of the parabola $x^2 = 4ay$, then opening of the parabola is upward of the:	A. x-axis B. y-axis C. Major axis D. Minor axis
73	$y^2 = 4ax$, is the standard equation of the:	A. Ellipse B. Parabola C. Hyperbola D. None of these
74	The opening of the parabola $x^2 = 16y$ is to _____ of the x-axis:	A. Left B. Upward C. Right D. Downward
75	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
76	The equation of the latus-rectum of the parabola $y^2 = 4ax$ is:	A. x = a B. x = -a C. y = a D. y = -a
77	The directrix of the parabola $y^2 = 4ax$ is:	A. x = a B. x = -a C. y = a D. y = - a
78	If equation of circle is $(x - h)^2 + (y - k)^2 = r^2$, then center of a circle:	A. (-h, -k) B. (h, k) C. (-h, k) D. (h, -k)
79	If r is the radius of the circle and its center is at origin, then equation of circle is:	A. x² + y² = a² B. x² + y² = r² C. x² - y² = a² D. x² - y² = r²
80	The vertex of the parabola $x^2 = 4ay$ is:	A. (-a, 0) B. (0, a) C. (0, -a) D. (0, 0)
81	Point p (-5, 6) lies ..... the circle $x^2 + y^2 + 4x - 6y - 12 = 0$	A. Outside B. Inside C. On D. None of these
82	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
83	If the focus lies on the x-axis with coordinates F(a, 0) and directrix of the parabola is = - a then the equation of parabola is:	A. x² = 4ay B. y²= 4ax C. -x²= 4ay D. -y²= 4ax
84	An angle in a semi-circle is:	A. 0° B. 90° C. 180° D. 60°
85	Length of tangent from (a, 0) to the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is:	B. c C. 2g + 2f -c D. None
86	The axis of the parabola $x^2 = 4ay$ is:	A. x = 0 B. x = -a C. y = 0 D. y = -a
87	A line segment joining two distinct points on a parabola is called a _____ of the parabola:	A. Chord B. Vertex C. Focus D. Directrix
88	If the equation of the parabola is y2 = 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

89	Point (5, 6) lies ..... the circle $x^2 + y^2 = 81$:	A. Outside B. Inside C. On D. None of these
90	The ratio between the measure of the radial segment and the diameter of a circle is:	A. 2 : 1 B. 4 : 3 C. 1 : 2
91	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the section a / an:	A. Parabola B. Hyperbola C. Ellipse D. None of these
92	The focus of the parabola $y^2=4ax$ is:	A. (-a , 0) B. (0, a) C. (0, -a) D. (a, 0)
93	The focus of the parabola x2=-4ay is:	A. (-a , 0) B. (0, a) C. (0, -a) D. (a, 0)
94	Question Image	A. a B. 2b C. b D. 2a
95	A line segment having both the end-points on a circle and not passing through the center is called a:	A. A chord B. A secant C. A diameter D. None of these
96	The distance between the center of a circle and any point of the circle is called:	A. Tangents B. Secant C. Diameter D. Radius
97	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
98	The length of the latus rectum of the parabola $y^2 = 4ax$ is:	A. a B. 4a C. 2a D. None of these
99	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. x² = 4ay B. -x²= 4ay C. -y²= 4ax D. y²= 4ax
100	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