ECAT Pre General Science Mathematics Chapter 23 Conic Section Online Test

Sr	Questions	Answers Choice
1	The equation of vertical asymptotes of $y = \cos ecx$ is	A. $x = 0$ B. $y = 0$ C. $x = \infty$ D. $y = \infty$
2	The straight line passing through the focus and perpendicular to the directrix of the conic is known as its	A. Tangent B. axis C. Focal chord D. major or manor axis
3	The equation of the tangent at vertex to the parabola is $y2 = -8(x - 3)$	A. $y=0$ B. $x=3$ C. $x=1$ D. $x=5$
4	The conic $ax2+2hxy+by2+2gx+2fy+c= 0$ never represent a circle if	A. $a \neq b, h \neq 0$ B. $a=b$ C. $h \neq 0$ D. $h=0$
5	If $a > 0$ they parabola $y2 =-4ax$ lies in	A. I and iv quadrant B. I quadrant C. II and III quadrant D. All are incorrect
6	The span of a standard parabola depends upon	A. x B. a C. y D. y2
7	Equation of parabola with focus F(-3,1) directrix x=3 is	A. $(y -1)2 =-12x$ B. $(y-1)2 =4x$ C. $(x+3)2 =4a(y-1)$ D. $y2 =-12(x-1)$
8	The common point to four standard parabolas	A. Focus B. Centre C. Vertex D. P(x,y)
9	$x =r \cos\theta, y= \sin\theta$ are the parametric equations of	A. Circle B. Ellipse C. Parabola D. Hyoerbola
10	The centre of the circle $x2+y2 -2fx-2gy+x=0$ is	A. (-g,-f) B. (g,f) C. (f,g) D. (-f,-g)
11	Two tangents drawn from (2,3) to the circle $x2+y2 =9$ are	A. Real and distinct B. Imaginary C. Real and coincident D. None of these
12	Area of the circle with ends of a diameter at (-3,2) and (5,-6)	A. 128π sq. units B. 64π sq. units C. 32π sq.units D. None of these
13	Equation of the chord of contact to the tangents drawn from (-3,4) to the circle $x2 + y2 = 21$	A. -3x + 4y =21 B. 4x - 3x = 0 C. -3x + 4y = 25 D. None of these
14	The line joining the center of a circle to the midpoint of the chord is	A. Perpendicular to the tnagent B. Perpendicular to the normal C. Perpendicular to the chord D. Perpendicular to the chord
15	Two circles $x2 +y2 +8x -9= 0$ and $x2+y2+6y +k =0$ touchinternallyif the value of k is	A. k = 9 B. k = ±9 C. k=-9 D. k=11

16	For what value of k, 3x -2y+ k= 0 is tangent to the circle $x^2 +y^2 +6x -4y =0$	A. k=0 B. k=0 or 26 C. k = 26 D. k=-13
17	Equation of normal to the circle $x^2 + y^2 =25$ at $(5\cos\theta,5\sin\theta)$	A. $x\cos\theta+y\sin\theta =5$ B. $x\cos\theta -y\sin\theta =0$ C. $x\sin\theta -y\cos\theta =0$ D. None of these
18	y=-a is the equation of the directrix of	A. $y^2 =4ax$ B. $x^2=-4ay$ C. $x^2=4ay$ D. $y^2=-4ax$
19	The parabola $y^2=4ax$ open up if	A. a<0 B. a≠0 C. a>0 D. All are incorrect
20	The number of standard parabolic functions are is	A. 4 B. 2 C. 3 D. 1
21	The vertex of the parabola $(x\sin a -y\cos a)^2 =4a(x\cos a +y\sin a)$ lies at	A. (acos a,asin a) B. (a,0) C. (cos a,sin a) D. (0,0)
22	Number of conics is	A. 1 B. 3 C. 2 D. 4
23	If (2,0) is the vertex and y-axis is directrix of parabola then focus is	A. (2,0) B. (-2,0) C. (4,0) D. (-4,0)
24	The line y =mx +1 is tangent to the parabola $y^2 =4x$ if	A. m=1 B. m=2 C. m=3 D. m=4
25	If 2x +y + λ =0 is normal to parabola $y^2 =-8x$,λ= _____	A. 12 B. 8 C. 24 D. -24
26	The tangent to the parabola $y^2 =4ax$ and perpendicular line from the focus on it meet	A. x =0 B. y =0 C. x =-9 D. y = -a
27	Two circle s1: $x^2+ y^2 +2x- 2y- 7= 0$: s2: $x^2+ y^2- 6x+ 4y+ 9= 0$	A. Touch externally B. Touch internally C. Intersects each other D. Do not intersects
28	The equation $x^2+ y^2- 8x+ 6y+ 25= 0$ represents	A. A circle B. A pair of straight lines C. A point D. None of these
29	The slope of the tangent at the point (h,h) of the circle $x^2 +y^2 =a^2$ is	A. 0 B. 1 C. -1 D. h
30	The number of tangents to the circle $x^2+ y^2 -8x -6y +9 =0$ which pass through the point (3,-2) is	A. 2 B. 1 C. 0 D. None of these
31	The area of the circle centred at (1,2) and passing through (4,6) is	A. 30 πsq.units B. 5π sq.units C. 15π sq.units D. 25π sq.units
32	If the line 2x -y +k =0 is a diameter of the circle $x^2 +y^2 +6x -6y +5 =0$ then k is equal to	A. 12 B. 9 C. 6 D. 3
33	The second degree equation $2x^2 -xy+ 5x -2y +2 =0$ represents	A. Circle B. Hyperbola C. Ellipse

34	The remove the term involving xy, from $7x^2 -6\sqrt{3}xy+ 13y^2 -16 =0$ the angel of rotation is	A. $\theta = 30°$ B. $\theta = 45°$ C. $\theta = 60°$ D. $\theta = 75°$
35	$ax^2 +2hxy +by^2 +2gx +2fy +c =0$ may represent an ellipse if	A. $h^2 -ab <0$ B. $h^2 -ab\neq 0$ C. $h^2 -ab =0$ D. $h^2 -ab >0$
36	If either A = 0 or B =0,then $Ax^2 +By^2 +2Gx +2Fy +c =0$ represents a	A. Circle B. Hyperbola C. Ellipse D. Parabola
37	Intersection of two parabolas	A. parabola B. Two points C. Four points D. Hyperobla
38	The centre of the conic $x^2 +16x +4y^2 -16y +76 =0$ is	A. (0,10) B. (-8,4) C. (-8,-2) D. (1,1)
39	The sum of the focal distance from any point on the ellipse $9x^2 +16y^2 =144$ is	A. 32 B. 16 C. 18 D. 8
40	If eccentricity of ellipse becomes zero then it takes the form of	A. A parabola B. A circle C. A straight line D. None of these
41	The line $2x +\sqrt{6}y =2$ is a tangent to the curve $x^2 -2y^2 =4$ The point of contact is	A. $(\sqrt{6},1)$ B. (2,3) C. $(7,-2\sqrt{6})$ D. $(4,-\sqrt{6})$
42	If e,e′ be the eccentricities of two conics S=0 and S′ =0 and if $e^2 +e′^2 =3$ then both S and S′ can be	A. Hyperbola B. Parabolas C. Ellipses D. None of these
43	The line $y= 4x +c$ touches the hyperbola $x^2- y^2 =1$ if and only if	A. $c =\pm\sqrt{2}$ B. $c =0$ C. $c=\pm\sqrt{17}$ D. $c=\pm\sqrt{15}$
44	The eccentricity e of an ellipse is always	A. Rational B. Real C. Irrational D. Integer
45	For the parabola the line through focus and perpendicular to the directrix is called	A. Tangent B. Vertex C. Axis D. None
46	A line joining two distinct points on a parabola is called	A. Axis B. Directrix C. Chord D. Tangent
47	The directrix of $y^2 =-4ax$ is	A. y =-a B. y = a C. x = a D. x = -a
48	The ellipse and hyperbola are called	A. Concentric conics B. Central conics C. Both a b D. None
49	If the distance of any point on the curve from any of the two lines approaches zero then it is called	A. Axis B. Directrices C. Asymptotes D. None
50	The second degree equation of the form $Ax^2 +By^2 +Gx +Fy +C =0$ represent hyperbola if	A. $A = B\neq 0$ B. $A\neq B$ and both are of same sign C. $A\neq B$ both are of opposite sign D. Either A = 0 or B =0
		A. a line

51	Conic sections or simply conics are the curves obtained by cutting a right circular cone by	B. two lines C. a plane D. two planes
52	If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a	A. parabola B. circle C. hyperbola D. ellipse
53	If a plane passes through the vertex of a cone then the intersection is	A. an ellipse B. a hyperbola C. a point circle D. a parabola
54	If the cutting plane is slightly tilted and cuts only one nappe of the cone, the intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
55	If the intersecting plane is parallel to a generator of the cone, but intersects its one nappe only, the curve obtained is	A. an ellipse B. a hyperbola C. a circle D. a parabola
56	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the curve of intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
57	The fixed point from which all the points of a circle are equidistant is called the	A. chord of the circle B. centre of the circle C. diameter of the circle D. radius of the circle
58	The constant distance of all points of the circle from its centre is called the	A. radius of the circle B. secant of the circle C. chord of the circle D. diameter of the circle
59	The equation of the circle with centre (h, k) and radius r is	A. $(x+h)^2 + (y+k)^2 = r^2$ B. $(x+h)^2 + (y-k)^2 = r^2$ C. $(x-h)^2 + (y+k)^2 = r^2$ D. $(x-h)^2 + (y-k)^2 = r^2$
60	The equation of the circle with centre (-h, -k) and radius r is	A. $(x+h)^2 + (y+k)^2 = r^2$ B. $(x+h)^2 + (y-k)^2 = r^2$ C. $(x-h)^2 + (y+k)^2 = r^2$ D. $(x-h)^2 + (y-k)^2 = r^2$
61	The equation of the circle with centre origin and radius r is	A. $x^2 + y^2 = 1$ B. $x^2 + y^2 = r^2$ C. $x^2 + y^2 = 0$ D. $x^2 - y^2 = r^2$
62	The equation of the circle witch centre (-3, 5) and radius 7 is	A. $(x-3)^2 + (y+5)^2 = 7^2$ B. $(x-3)^2 + (y-5)^2 = 7^2$ C. $(x+3)^2 + (y+5)^2 = 7^2$ D. $(x+3)^2 + (y-5)^2 = 7^2$
63	The equation of the circle with centre (5, -2) and radius 4 is	A. $(x-5)^2 + (y+2)^2 = 16$ B. $(x-5)^2 + (y+2)^2 = 4$ C. $(x-5)^2 + (y-2)^2 = 16$ D. $(x-5)^2 + (y-2)^2 = 4$
64	Question Image	
65	Question Image	
66	Question Image	

67	The equation of the circle wit (-1, 1) and radius 2 is	
68	Question Image	
69	Question Image	
70	The parametric equations of a circle are	
71	Question Image	A. (g,f) B. (-g,f) C. (g,-f) D. (-g,-f)
72	Question Image	
73	The centre fo the circle $x^2 + y^2 + 12x - 10 = 0$ is	A. (12, -10) B. (6, -5) C. (-12, 10) D. (-6, 5)
74	Question Image	A. (-6,4) B. (-3,2) C. (6,-4) D. (3, -2)
75	Question Image	A. 11 B. 61 D. 1
76	Question Image	A. 0 B. 1 C. 13
77	Question Image	A. 8 C. 4 D. 64
78	Question Image	A. (1, 3) B. (-1, -3) C. (1, -3) D. (-1, 3)
79	Two circles are said to be concentric if they have	A. same radius B. same chord C. same centre D. same diameter
80	Question Image	
81	Question Image	
82	Question Image	A. 5 B. 25 D. 3
83	Question Image	A. 2 B. 4 C. 3 D. 16
84	Question Image	
85	Question Image	
86	The general equation of a circle is	
87	Question Image	
88	If (0, 0) and (1, 0) are the end points of a diameter, then the equation of the circle is	
89	If (0, 0) and (-1, 0) are end points of a diameter, then the equation of the circle is	
90	If (0, 0) and (0, -1) are end points of a diameter, then the equation of the circle is	
91	If the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ passes through the origin then	A. c = 0 B. c = -1 C. c = -2 D. c = 1
92	If (x_1, y_1) and (x_2, y_2) are the end points of a diameter then the centre of the circle is	
93	Question Image	A. c = 0 B. c = -1 C. c = -2 D. c = 1

#	Question	Options
94	Question Image	A. c = 0 B. c = -1 C. c = -2 D. c = 1
95	If (2, 3) and (2, 5) are end points of a diameter of a circle, then the centre of the circle is	A. (2, 4) B. (4, 8) C. (0, 2) D. (0, -2)
96	Question Image	
97	Question Image	
98	Question Image	D. none of these
99	Question Image	D. none of these
100	Question Image	D. none of these
101	Question Image	
102	Question Image	D. none of these
103	Question Image	D. none of these
104	Question Image	D. none of these
105	The tangents drawn from the point P to a circle are imaginary if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
106	The tangents drawn from the point P to a circle are real and coincident if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
107	The tangents drawn from the point P to a circle are real and distinct if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
108	Question Image	D. none of these
109	Question Image	
110	Question Image	
111	Question Image	
112	Question Image	
113	Question Image	D. none of these
114	Question Image	
115	Question Image	
116	Question Image	
117	Question Image	
118	Question Image	
119	Question Image	
120	Question Image	
121	Question Image	
122	Question Image	A. 184 D. none of these
123	Question Image	A. 6 C. 20 D. 0
124	A line segment whose end points lie on a circle is called	A. the secant of the circle B. the arc of the circle C. the chord of the circle D. the circumference of the circle

125	A chord passing through the centre of the circle is called	A. the secant of the circle B. the tangent of the circle C. the arc of the circle D. the diameter of the circle
126	The eccentricity of the conic $9x^2 - 16y^2 = 144$ is	A. 4/5 B. 5/4 C. 4/3 D. 3/4
127	The line $y = 4x + c$ touches the hyperbola $x^2 - y^2 = 1$ if	
128	Question Image	
129	A rectangular hyperbola whose centre is C is cut by any circle of radius r in four points P, Q, R and S. Then $CP^2 + CQ^2 + CR^2 + CS^2 =$	A. r^2 B. $2r^2$ C. $3r^2$ D. $4r^2$
130	Question Image	A. A parabola B. An ellipse C. A hyperbola D. A circle
131	Question Image	A. 1 B. 5 C. 7 D. 9
132	Question Image	
133	The equation $x^2 + y^2 = 0$ represents	A. A circle B. A degenerate circle C. An empty set D. A st. line
134	Circumcentre of the triangle, whose vertices are (0, 0), (6, 0) and (0, 4) is	A. (2, 0) B. (3, 0) C. (0, 3) D. (3, 2)
135	The line $Ax + By + C = 0$ will touch the circle $x^2 + y^2 = \lambda$ *when*	A. $C^2 = \lambda(A^2 + B^2)$ B. $A^2 = \lambda(A^2 + C^2)$ C. $B^2 = \lambda(A^2 + C^2)$ D. None of these
136	The equation of the chord of the circle $x^2 + y^2 - 4x = 0$ whose mid-point is (1, 0) is	A. $y = 2$ B. $y = 1$ C. $x = 2$ D. $x = 1$
137	The length of the tangent from (2, 1) to the circle $x^2 + y^2 + 4y + 3 = 0$ is	
138	The eccentricity of the parabola $y^2 = -8x$ is	A. -2 B. 2 C. -1 D. 1
139	The equation of the directrix of the parabola $x^2 = 4ay$ is	A. $x + a = 0$ B. $x - a = 0$ C. $y + a = 0$ D. $y - a = 0$
140	The equation of the parabola with directrix $x = 2$ and the axis $y = 0$ is	A. $y^2 = 8x$ B. $y^2 = -8x$ C. $y^2 = 4x$ D. $y^2 = -4x$
		A. -2

141	The line $y = 2x + c$ is a tangent to the parabola $y^2 = 16x$ if c equals	B. -1 C. 0 D. 2

Question 141: B. -1, C. 0, D. 2 (D highlighted)

| 142 | The slope of the normal at the point $(at^2, 2at)$ of the parabola $y^2 = 4ax$ is | A. 1/t
B. t
C. -t
D. -1/t |

(C. -t highlighted)

| 143 | The equation $ax^2 + 2hxy + by^2 + 2gx + 2fy + c = 0$ represents an ellipse if | |

| 144 | The latus rectum of the ellipse $5x^2 + 9y^2 = 45$ is | A. 10 / 3
B. 5 / 3
C. 3 / 5
D. 3 / 10 |

(A. 10 / 3 highlighted)

| 145 | Question Image | A. An ellipse
B. A parabola
C. A circle
D. A hyperbola |

(A. An ellipse highlighted)

| 146 | A circle is a limiting case of an ellipse whose eccentricity | A. Tends to a
B. Tends to b
C. Tends to 0
D. Tends to a + b |

(C. Tends to 0 highlighted)

| 147 | Question Image | A. 2 b
B. 2 a
C. 2 ab
D. a + b |

(B. 2 a highlighted)

| 148 | The line $3x - 4y = 0$ | A. Is a tangent to the circle $x^2 + y^2 = 25$
B. Is a normal to the circle $x^2 + y^2 = 25$
C. Does not meet the circle $x^2 + y^2 = 25$
D. Does not pass thro' the origin |

(B. highlighted)

| 149 | The equation of a line parallel to the tangent to the circle $x^2 + y^2 = 16$ at the point (2, 3) and passing thro' the origin is | A. 2x + 3y = 0
B. 2x - 3y = 0
C. 3x + 2y = 0
D. 3x - 2y = 0 |

(A. 2x + 3y = 0 highlighted)

| 150 | A square is inscribed in the circle $x^2 + y^2 - 2x + 4y + 3 = 0$. Its sides are parallel to the co-ordinate axes. Then one vertex of the square is | |

| 151 | If the st. line $3x + 4y = K$ touches the circle $x^2 + y^2 - 10x = 0$ then the value of K is | A. -1 or 20
B. -10 or 40
C. -2 or 20
D. 2 or 20 |

(B. -10 or 40 highlighted)

| 152 | If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a | A. Parabola
B. Circle
C. Hyperbola
D. Ellipse |

(B. Circle highlighted)

| 153 | The constant distance of all points of the circle from its centre is called the | A. Radius of the circle
B. Secant of the circle
C. Chord of the circle
D. Diameter of the circle |

(A. Radius of the circle highlighted)

| 154 | Question Image | |

| 155 | The radius of the circle $(x - 1)^2 + (y + 3)^2 = 61$ is | A. 8
B. 4
C. 64
D. None of these |

(A. 8 highlighted)

| 156 | The point on $y^2 = 4ax$ nearest to the focus has its abciassae equal to | A. -a
B. a
C. a/2
D. 0 |

(D. 0 highlighted)

| 157 | If t is the parameter for one end of a focal chord of the parabola $y^2 = 4ax$, then its length is | |

| 158 | If (a, b) is the mid-point of a chord passing thro' the vertex of the parabola $y^2 = 4x$, then | A. a = 2b
B. 2a = b
C. $a^2 = 2b$
D. $2a = b^2$ |

(D. $2a = b^2$ highlighted)

| 159 | The parabola $y^2 = x$ is symmetric about | A. x-axis
B. y-axis
C. Both x and y-axis
D. The line y = x |

(A. x-axis highlighted)

| 160 | ... | A. 2
B. 4 |

160	If x + y + 1 = 0 touches the parabola $y^2 = \lambda x$, then λ is equal to	C. 6 D. 8
161	The circle $(x - 2)^2 + (y + 3)^2 = 4$ is not concentric with the circle	A. $(x - 2)^2 + (y + 3)^2 = 9$ B. $(x + 2)^2 + (y - 3)^2 = 4$ C. $(x + 2)^2 + (y - 3)^2 = 8$ D. $(x - 2)^2 + (y + 3)^2 = 5$
162	The point (x_1, y_1) lies outside the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ if	
163	The equation of the normal to the circle $x^2 + y^2 = 25$ at (4, 3) is	A. 3x - 4y = 0 B. 3x - 4y = 5 C. 4x + 3y = 5 D. 4x + 3y = 25
164	A line segment whose end points lie on a circle is called	A. The secant of the circle B. The arc of the circle C. The chord of the circle D. The circumference of the circle
165	The perpendicular bisector of any chord of a circle	A. Passes through the centre of the circle B. Does not pass through the centre of the circle C. May or may not pass through the centre of the circle D. None of these
166	The conic is a parabola if	A. e < 1 B. e > 1 C. e = 1 D. None of these
167	The axis of the parabola $y^2 = 4ax$ is	A. X = 0 B. Y = 0 C. X = y D. X = -y
168	The end points of the major axis of the ellipse are called its	A. Foci B. Vertices C. Co - vertices D. None of these
169	The vertices of the ellipse $x^2 + 4y^2 = 16$ are	
170	The line through the centre and perpendicular to the transverse axis is called the	A. Major axis B. Minor axis C. Focal axis D. Conjugate axis
171	The two different parts of the hyperbola are called its	A. Vertices B. Directrices C. Nappes D. Branches
172	The number of real tangents that can be drawn to the ellipse $3x^2 + 5y^2 = 32$ passing thro. (3, 5) is	A. 0 B. 1 C. 2 D. Infinite
173	The locus of the point of intersection of tangents to an ellipse at two points, sum of whose eccentric angles is constant is	A. A parabola B. A circle C. An ellipse D. A st. line
174	The point where the axis meets the parabola is called	A. Directrix B. Foucu C. Chord D. Vertix
175	If (0,4) and (0,2) are vertex and focus of the parabola respectively, the the equation of the parabola is:	A. $x^2 = 4y - 32$ B. $x^2 = 8y - 32$ C. $y^3 = 16x$ D. x2 + 8y = 32
176	The vertex of the equation $y^2 = 4ax$ is:	A. (2, -2) B. (1,1) C. (0 , 0) D. (2 , 2)
177	The line through the focus and perpendicular to the directrix is called _____ of the parabola	A. axis B. focal chord C. tangent D. latus rectum

178	ϱ is a	A. variable B. Positive constant C. Positive variable D. Directrix
179	If the focus lies on the y-axis with coordinates f(0,a) and directrix of the parabola is y = -a, the equation of parabola is:	A. $y^2 = -4ax$ B. $x^2 = 4ay$ C. $x^2 = -4ay$ D. $y^2 = 4ax$
180	A line joining two distinct points on a parabola is called a _____ of the parabola.	A. Chord B. Tangent C. Lust rectum D. directrix
181	I f the focus is F (0,-a) and directrix is the line v=a, then equation of the parabola is:	A. $x^2 = 4ay$ B. $y^2 = 4ax$ C. $y^2 = -4ax$ D. $x^2 = 4ax$
182	y=0 of the parabola $y^2 = 4ax$ is the	A. equation of directirx B. Equatio of the tangent C. Equation of axis D. equation of latus rectum
183	a chord passing through the focus of a parabola is called a:	A. Focal chord B. Latus rectum C. Tangent D. Directrix
184	The distance of point P(x,y) from focus in a parabola $y^2 = 4ax$, is:	A. 2a B. a C. x + a D. x-a
185	If the vertex of the parabola is the origin and directrix is x+5 = 0 . then its latus rectum is:	A. 10 B. 5 C. 0 D. 20
186	The conic is a parabola, when:	A. $\varrho > 1$ B. $\varrho < 1$ C. $\varrho = 1$ D. $\varrho = 0$
187	What is the axis of the parabola $y^2 = 4ax$?	A. x = 0 B. y = 0 C. x = a D. y = 0
188	The axis of the parabola $x^2 = 4ay$ is:	A. y = 0 B. x = 0 C. x = -a D. y = a
189	The parabola y2 + 2y + x = 0 lie in _____ quadrant.	A. First B. Second C. Third D. Fourth
190	The point which is closet to the focus of a parabola is:	A. vertex B. Chord C. Focus D. Directix
191	the curve of the parabola $y^2 = -4ax$ is symmetric with respect to	A. x -axis B. y - axis C. Botha x and y- axis D. None of thes
192	the latus rectum of the parabola $x^3 = -4ay$ is:	A. x = a B. y = -a C. x = -a D. y = 0
193	If $\varrho > 1$, then the conic, is:	A. Ellipse B. Parabola C. Hyperbola D. None of these
194	Latus rectum = 4 x _____	A. focal distance of the vertex B. Chord C. Focus D. 1/2
195	Which shape of the following objects are approximately parabolic area?	A. Light reflectors B. Force

195	Which shape of the following objects are approximately parabolic ares?	C. Weight of the pendul D. None of these
196	Coordinates of the focus of the parabola $x^2 - 4x - 8y - 4 = 0$ are:	A. (0,2) B. (,0,1) C. (2,0) D. (1,2)
197	Co-ordinate of a point on the parabola $y^2 = 8x$ whose focal distance is 4 are:	A. (2 , 4) B. (-2 ,-4) C. (-2, 4) D. (2,-4)
198	The eccentricity of parabola is:	A. 1 B. 0 C. Greater than 1 D. Less than 1
199	The lotus of intersection of perpendicular tangents to the parabola $y^2 = 4ax$ is:	A. Axis of the parabola B. Focal chord of the parabos C. The tangent at vertex of the parabola D. a directrix of the parabola
200	The eccentricity of ellipse becomes zero, then it takes the form of:	A. a parabols B. a straight line C. a circle D. None of these
201	An ellipse slides between two lines at right angles to one another. The locus of its centre is :	A. a parabola B. an ellipse C. a circle D. a hyperbola
202	The locus of the centre of a circle which touches two given circles externally is:	A. a hyperbola B. an ellipse C. a circle D. a parabola
203	The equation of vertical asymptotes of $y = \cos ecx$ is	A. $x = 0$ B. $y = 0$ C. $x = \infty$ D. $y = \infty$
204	The straight line passing through the focus and perpendicular to the directrix of the conic is known as its	A. Tangent B. axis C. Focal chord D. major or manor axis
205	The equation of the tangent at vertex to the parabola is $y2 = -8(x - 3)$	A. y=0 B. x=3 C. x=1 D. x=5
206	The conic $ax2 + 2hxy + by2 + 2gx + 2fy + c = 0$ never represent a circle if	A. $a \neq b, h \neq 0$ B. a=b C. $h \neq 0$ D. h=0
207	If a > 0 they parabola $y2 = -4ax$ lies in	A. I and iv quadrant B. I quadrant C. II and III quadrant D. All are incorrect
208	The span of a standard parabola depends upon	A. x B. a C. y D. y2
209	Equation of parabola with focus F(-3,1) directrix x=3 is	A. (y -1)2 =-12x B. (y-1)2 =4x C. (x+3)2 =4a(y-1) D. y2 =-12(x-1)
210	The common point to four standard parabolas	A. Focus B. Centre C. Vertex D. P(x,y)
211	$x = r \cos\theta, y = \sin\theta$ are the parametric equations of	A. Circle B. Ellipse C. Parabola D. Hyoerbola
212	The centre of the circle $x2 + y2 - 2fx - 2gy + x = 0$ is	A. (-g,-f) B. (g,f) C. (f,g) D. (-f,-g)

#	Question	Options
213	Two tangents drawn from (2,3) to the circle $x^2+y^2=9$ are	A. Real and distinct B. Imaginary C. Real and coincident D. None of these
214	Area of the circle with ends of a diameter at (-3,2) and (5,-6)	A. 128π sq. units B. 64π sq. units C. 32π sq.units D. None of these
215	Equation of the chord of contact to the tangents drawn from (-3,4) to the circle $x^2 + y^2 = 21$	A. $-3x + 4y =21$ B. $4x - 3x = 0$ C. $-3x + 4y = 25$ D. None of these
216	The line joining the center of a circle to the midpoint of the chord is	A. Perpendicular to the tnagent B. Perpendicular to the normal C. Perpendicular to the chord D. Perpendicular to the chord
217	Two circles $x^2 +y^2 +8x -9= 0$ and $x^2+y^2+6y +k =0$ touch internally if the value of k is	A. k = 9 B. k = ±9 C. k=-9 D. k=11
218	For what value of k, $3x -2y+ k= 0$ is tangent to the circle $x^2 +y^2 +6x -4y =0$	A. k=0 B. k=0 or 26 C. k = 26 D. k=-13
219	Equation of normal to the circle $x^2 + y^2 =25$ at $(5\cos\theta, 5\sin\theta)$	A. $x\cos\theta+y\sin\theta =5$ B. $x\cos\theta -y\sin\theta =0$ C. $x\sin\theta -y\cos\theta =0$ D. None of these
220	$y=-a$ is the equation of the directrix of	A. $y^2 =4ax$ B. $x^2=-4ay$ C. $x^2=4ay$ D. $y^2=-4ax$
221	The parabola $y^2=4ax$ open up if	A. a<0 B. a≠0 C. a>0 D. All are incorrect
222	The number of standard parabolic functions are is	A. 4 B. 2 C. 3 D. 1
223	The vertex of the parabola $(x\sin a -y\cos a)^2 =4a(x\cos a +y\sin a)$ lies at	A. (acos a,asin a) B. (a,0) C. (cos a,sin a) D. (0,0)
224	Number of conics is	A. 1 B. 3 C. 2 D. 4
225	If (2,0) is the vertex and y-axis is directrix of parabola then focus is	A. (2,0) B. (-2,0) C. (4,0) D. (-4,0)
226	The line $y =mx +1$ is tangent to the parabola $y^2 =4x$ if	A. m=1 B. m=2 C. m=3 D. m=4
227	If $2x +y + \lambda =0$ is normal to parabola $y^2 =-8x$, $\lambda=$ _____	A. 12 B. 8 C. 24 D. -24
228	The tangent to the parabola $y^2 =4ax$ and perpendicular line from the focus on it meet	A. x =0 B. y =0 C. x =-9 D. y = -a
229	Two circle s1: $x^2+ y^2 +2x- 2y- 7= 0$: s2: $x^2+ y^2- 6x+ 4y+ 9= 0$	A. Touch externally B. Touch internally C. Intersects each other D. Do not intersects
230	The equation $x^2+ y^2- 8x+ 6y+ 25= 0$ represents	A. A circle B. A pair of straight lines C. A point D. None of these

231	The slope of the tangent at the point (h,h) of the circle $x^2 + y^2 = a^2$ is	A. 0 B. 1 C. -1 D. h
232	The number of tangents to the circle $x^2 + y^2 - 8x - 6y + 9 = 0$ which pass through the point (3,-2) is	A. 2 B. 1 C. 0 D. None of these
233	The area of the circle centred at (1,2) and passing through (4,6) is	A. 30 πsq.units B. 5π sq.units C. 15π sq.units D. 25π sq.units
234	If the line $2x - y + k = 0$ is a diameter of the circle $x^2 + y^2 + 6x - 6y + 5 = 0$ then k is equal to	A. 12 B. 9 C. 6 D. 3
235	The second degree equation $2x^2 - xy + 5x - 2y + 2 = 0$ represents	A. Circle B. Hyperbola C. Ellipse D. Pair of straight lines
236	The remove the term involving xy, from $7x^2 - 6\sqrt{3}xy + 13y^2 - 16 = 0$ the angel of rotation is	A. θ = 30° B. θ = 45° C. θ = 60° D. θ = 75°
237	$ax^2 + 2hxy + by^2 + 2gx + 2fy + c = 0$ may represent an ellipse if	A. $h^2 - ab < 0$ B. $h^2 - ab \neq 0$ C. $h^2 - ab = 0$ D. $h^2 - ab > 0$
238	If either A = 0 or B = 0, then $Ax^2 + By^2 + 2Gx + 2Fy + c = 0$ represents a	A. Circle B. Hyperbola C. Ellipse D. Parabola
239	Intersection of two parabolas	A. parabola B. Two points C. Four points D. Hyperobla
240	The centre of the conic $x^2 + 16x + 4y^2 - 16y + 76 = 0$ is	A. (0,10) B. (-8,4) C. (-8,-2) D. (1,1)
241	The sum of the focal distance from any point on the ellipse $9x^2 + 16y^2 = 144$ is	A. 32 B. 16 C. 18 D. 8
242	If eccentricity of ellipse becomes zero then it takes the form of	A. A parabola B. A circle C. A straight line D. None of these
243	The line $2x + \sqrt{6}y = 2$ is a tangent to the curve $x^2 - 2y^2 = 4$ The point of contact is	A. ($\sqrt{6}$,1) B. (2,3) C. (7,-2$\sqrt{6}$) D. (4,-$\sqrt{6}$)
244	If e,e′ be the eccentricities of two conics S=0 and S′ =0 and if $e^2 + e'^2 = 3$ then both S and S′ can be	A. Hyperbola B. Parabolas C. Ellipses D. None of these
245	The line $y = 4x + c$ touches the hyperbola $x^2 - y^2 = 1$ if and only if	A. c = ±$\sqrt{2}$ B. c = 0 C. c = ±$\sqrt{17}$ D. c = ±$\sqrt{15}$
246	The eccentricity e of an ellipse is always	A. Rational B. Real C. Irrational D. Integer
247	For the parabola the line through focus and perpendicular to the directrix is called	A. Tangent B. Vertex C. Axis D. None
248	A line joining two distinct points on a parabola is called	A. Axis B. Directrix

248	A line joining two distinct points on a parabola is called	C. Chord D. Tangent
249	The directrix of $y^2 = -4ax$ is	A. $y = -a$ B. $y = a$ C. $x = a$ D. $x = -a$
250	The ellipse and hyperbola are called	A. Concentric conics B. Central conics C. Both a b D. None
251	If the distance of any point on the curve from any of the two lines approaches zero then it is called	A. Axis B. Directrices C. Asymptotes D. None
252	The second degree equation of the form $Ax^2 + By^2 + Gx + Fy + C = 0$ represent hyperbola if	A. $A = B \neq 0$ B. $A \neq B$ and both are of same sign C. $A \neq B$ both are of opposite sign D. Either $A = 0$ or $B = 0$
253	Conic sections or simply conics are the curves obtained by cutting a right circular cone by	A. a line B. two lines C. a plane D. two planes
254	If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a	A. parabola B. circle C. hyperbola D. ellipse
255	If a plane passes through the vertex of a cone then the intersection is	A. an ellipse B. a hyperbola C. a point circle D. a parabola
256	If the cutting plane is slightly tilted and cuts only one nappe of the cone, the intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
257	If the intersecting plane is parallel to a generator of the cone, but intersects its one nappe only, the curve obtained is	A. an ellipse B. a hyperbola C. a circle D. a parabola
258	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the curve of intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
259	The fixed point from which all the points of a circle are equidistant is called the	A. chord of the circle B. centre of the circle C. diameter of the circle D. radius of the circle
260	The constant distance of all points of the circle from its centre is called the	A. radius of the circle B. secant of the circle C. chord of the circle D. diameter of the circle
261	The equation of the circle with centre (h, k) and radius r is	A. $(x+h)^2 + (y+k)^2 = r^2$ B. $(x+h)^2 + (y-k)^2 = r^2$ C. $(x-h)^2 + (y+k)^2 = r^2$ D. $(x-h)^2 + (y-k)^2 = r^2$
262	The equation of the circle with centre (-h, -k) and radius r is	A. $(x+h)^2 + (y+k)^2 = r^2$ B. $(x+h)^2 + (y-k)^2 = r^2$ C. $(x-h)^2 + (y+k)^2 = r^2$ D. $(x-h)^2 + (y-k)^2 = r^2$
263	The equation of the circle with centre origin and radius r is	A. $x^2 + y^2 = 1$ B. $x^2 + y^2 = r^2$ C. $x^2 + y^2 = 0$ D. $x^2 - y^2 = r^2$

264	The equation of the circle witch centre (-3, 5) and radius 7 is	A. $(x-3)^2 + (y+5)^2 = 7^2$ B. $(x-3)^2 + (y-5)^2 = 7^2$ C. $(x+3)^2 + (y+5)^2 = 7^2$ D. $(x+3)^2 + (y-5)^2 = 7^2$
265	The equation of the circle with centre (5, -2) and radius 4 is	A. $(x-5)^2 + (y+2)^2 = 16$ B. $(x-5)^2 + (y+2)^2 = 4$ C. $(x-5)^2 + (y-2)^2 = 16$ D. $(x-5)^2 + (y-2)^2 = 4$
266	Question Image	
267	Question Image	
268	Question Image	
269	The equation of the circle wit (-1, 1) and radius 2 is	
270	Question Image	
271	Question Image	
272	The parametric equations of a circle are	
273	Question Image	A. (g,f) B. (-g,f) C. (g,-f) D. (-g,-f)
274	Question Image	
275	The centre fo the circle $x^2 + y^2 + 12x - 10 = 0$ is	A. (12, -10) B. (6, -5) C. (-12, 10) D. (-6, 5)
276	Question Image	A. (-6,4) B. (-3,2) C. (6,-4) D. (3, -2)
277	Question Image	A. 11 B. 61 D. 1
278	Question Image	A. 0 B. 1 C. 13
279	Question Image	A. 8 C. 4 D. 64
280	Question Image	A. (1, 3) B. (-1, -3) C. (1, -3) D. (-1, 3)
281	Two circles are said to be concentric if they have	A. same radius B. same chord C. same centre D. same diameter
282	Question Image	
283	Question Image	
284	Question Image	A. 5 B. 25 D. 3
285	Question Image	A. 2 B. 4 C. 3 D. 16
286	Question Image	

287	Question Image	
288	The general equation of a circle is	
289	Question Image	
290	If (0, 0) and (1, 0) are the end points of a diameter, then the equation of the circle is	
291	If (0, 0) and (-1, 0) are end points of a diameter, then the equation of the circle is	
292	If (0, 0) and (0, -1) are end points of a diameter, then the equation of the circle is	
293	If the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ passes through the origin then	A. c = 0 B. c = -1 C. c = -2 D. c = 1
294	If (x_1, y_1) and (x_2, y_2) are the end points of a diameter then the centre of the circle is	
295	Question Image	A. c = 0 B. c = -1 C. c = -2 D. c = 1
296	Question Image	A. c = 0 B. c = -1 C. c = -2 D. c = 1
297	If (2, 3) and (2, 5) are end points of a diameter of a circle, then the centre of the circle is	A. (2, 4) B. (4, 8) C. (0, 2) D. (0, -2)
298	Question Image	
299	Question Image	
300	Question Image	D. none of these
301	Question Image	D. none of these
302	Question Image	D. none of these
303	Question Image	
304	Question Image	D. none of these
305	Question Image	D. none of these
306	Question Image	D. none of these
307	The tangents drawn from the point P to a circle are imaginary if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
308	The tangents drawn from the point P to a circle are real and coincident if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
309	The tangents drawn from the point P to a circle are real and distinct if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
310	Question Image	D. none of these
311	Question Image	
312	Question Image	
313	Question Image	
314	Question Image	
315	Question Image	D. none of these
316	Question Image	
317	Question Image	
318	Question Image	

319	Question Image	
320	Question Image	
321	Question Image	
322	Question Image	
323	Question Image	
324	Question Image	A. 184 D. none of these
325	Question Image	A. 6 C. 20 D. 0
326	A line segment whose end points lie on a circle is called	A. the secant of the circle B. the arc of the circle C. the chord of the circle D. the circumference of the circle
327	A chord passing through the centre of the circle is called	A. the secant of the circle B. the tangent of the circle C. the arc of the circle D. the diameter of the circle
328	The eccentricity of the conic $9x^2 - 16y^2 = 144$ is	A. 4/5 B. 5/4 C. 4/3 D. 3/4
329	The line $y = 4x + c$ touches the hyperbola $x^2 - y^2 = 1$ if	
330	Question Image	
331	A rectangular hyperbola whose centre is C is cut by any circle of radius r in four points P, Q, R and S. Then $CP^2 + CQ^2 + CR^2 + CS^2 =$	A. r^2 B. $2r^2$ C. $3r^2$ D. $4r^2$
332	Question Image	A. A parabola B. An ellipse C. A hyperbola D. A circle
333	Question Image	A. 1 B. 5 C. 7 D. 9
334	Question Image	
335	The equation $x^2 + y^2 = 0$ represents	A. A circle B. A degenerate circle C. An empty set D. A st. line
336	Circumcentre of the triangle, whose vertices are (0, 0), (6, 0) and (0, 4) is	A. (2, 0) B. (3, 0) C. (0, 3) D. (3, 2)
337	The line $Ax + By + C = 0$ will touch the circle $x^2 + y^2 = \lambda\ when$	A. $C^2 = \lambda(A^2 + B^2)$ B. $A^2 = \lambda(A^2 + C^2)$ C. $B^2 = \lambda(A^2 + C^2)$ D. None of these

338	The equation of the chord of the circle $x^2+ y^2- 4x = 0$ whose mid-point is (1, 0) is	A. y = 2 B. y = 1 C. x = 2 D. x = 1
339	The length of the tangent from (2, 1) to the circle $x^2+ y^2+ 4y + 3 = 0$ is	
340	The eccentricity of the parabola $y^2= -8x$ is	A. -2 B. 2 C. -1 D. 1
341	The equation of the directrix of the parabola $x^2= 4ay$ is	A. x + a = 0 B. x - a = 0 C. y + a = 0 D. y - a = 0
342	The equation of the parabola with directrix x = 2 and the axis y = 0 is	A. $y^2= 8x$ B. $y^2= -8x$ C. $y^2= 4x$ D. $y^2= -4x$
343	The line y = 2 x + c is a tangent to the parabola $y^2= 16 x$ if c equals	A. -2 B. -1 C. 0 D. 2
344	The slope of the normal at the point (at^2, 2at) of the parabola $y^2= 4ax$ is	A. 1/t B. t C. -t D. -1/t
345	The equation $ax^2+ 2hxy + by^2 +2gx + 2fy + c =0$ represents an ellipse if	
346	The latus rectum of the ellipse $5x^2+ 9y^2= 45$ is	A. 10 / 3 B. 5 / 3 C. 3 / 5 D. 3 / 10
347	Question Image	A. An ellipse B. A parabola C. A circle D. A hyperbola
348	A circle is a limiting case of an ellipse whose eccentricity	A. Tends to a B. Tends to b C. Tends to 0 D. Tends to a + b
349	Question Image	A. 2 b B. 2 a C. 2 ab D. a + b
350	The line 3x - 4y = 0	A. Is a tangent to the circle $x^2+ y^2= 25$ B. Is a normal to the circle $x^2+ y^2 =25$ C. Does not meet the circle $x^2+ y^2= 25$ D. Does not pass thro' the origin
351	The equation of a line parallel to the tangent to the circle $x^2+ y^2= 16$ at the point (2, 3) and passing thro' the origin is	A. 2x + 3y = 0 B. 2x - 3y = 0 C. 3x + 2y = 0 D. 3x - 2y = 0
352	A square is inscribed in the circle $x^2+ y^2- 2x + 4y + 3 =0$. Its sides are parallel to the co-ordinate axes. Then one vertex of the square is	
353	If the st. line 3x + 4y = K touches the circle $x^2+ y^2- 10x = 0$ then the value of K is	A. -1 or 20 B. -10 or 40 C. -2 or 20 D. 2 or 20
354	If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a	A. Parabola B. Circle C. Hyperbola D. Ellipse
355	The constant distance of all points of the circle from its centre is called the	A. Radius of the circle B. Secant of the circle C. Chord of the circle D. Diameter of the circle
356	Question Image	A. 2

357	The radius of the circle $(x - 1)^2 + (y + 3)^2 = 61$ is	A. 8 B. 4 C. 64 D. None of these
358	The point on $y^2 = 4ax$ nearest to the focus has its abciassae equal to	A. -a B. a C. a/2 D. 0
359	If t is the parameter for one end of a focal chord of the parabola $y^2 = 4ax$, then its length is	
360	If (a, b) is the mid-point of a chord passing thro' the vertex of the parabola $y^2 = 4x$, then	A. a = 2b B. 2a = b C. a^2 = 2b D. $2a = b^2$
361	The parabola $y^2 = x$ is symmetric about	A. x-axis B. y-axis C. Both x and y-axis D. The line y = x
362	If x + y + 1 = 0 touches the parabola $y^2 = \lambda x$, then λ is equal to	A. 2 B. 4 C. 6 D. 8
363	The circle $(x - 2)^2 + (y + 3)^2 = 4$ is not concentric with the circle	A. $(x - 2)^2 + (y + 3)^2 = 9$ B. $(x + 2)^2 + (y - 3)^2 = 4$ C. $(x + 2)^2 + (y - 3)^2 = 8$ D. $(x - 2)^2 + (y + 3)^2 = 5$
364	The point (x_1, y_1) lies outside the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ if	
365	The equation of the normal to the circle $x^2 + y^2 = 25$ at (4, 3) is	A. 3x - 4y = 0 B. 3x - 4y = 5 C. 4x + 3y = 5 D. 4x + 3y = 25
366	A line segment whose end points lie on a circle is called	A. The secant of the circle B. The arc of the circle C. The chord of the circle D. The circumference of the circle
367	The perpendicular bisector of any chord of a circle	A. Passes through the centre of the circle B. Does not pass through the centre of the circle C. May or may not pass through the centre of the circle D. None of these
368	The conic is a parabola if	A. e < 1 B. e > 1 C. e = 1 D. None of these
369	The axis of the parabola $y^2 = 4ax$ is	A. X = 0 B. Y = 0 C. X = y D. X = -y
370	The end points of the major axis of the ellipse are called its	A. Foci B. Vertices C. Co - vertices D. None of these
371	The vertices of the ellipse $x^2 + 4y^2 = 16$ are	
372	The line through the centre and perpendicular to the transverse axis is called the	A. Major axis B. Minor axis C. Focal axis D. Conjugate axis
373	The two different parts of the hyperbola are called its	A. Vertices B. Directrices C. Nappes D. Branches
374	The number of real tangents that can be drawn to the ellipse $3x^2 + 5y^2 = 32$ passing thro. (3, 5) is	A. 0 B. 1 C. 2 D. Infinite

#	Question	Options
375	The locus of the point of intersection of tangents to an ellipse at two points, sum of whose eccentric angles is constant is	A. A parabola B. A circle C. An ellipse D. A st. line
376	The point where the axis meets the parabola is called	A. Directrix B. Foucu C. Chord D. Vertix
377	If (0,4) and (0,2) are vertex and focus of the parabola respectively, the the equation of the parabola is:	A. $x^2 = 4y - 32$ B. $x^2 = 8y - 32$ C. $y^3 = 16x$ D. $x2 + 8y = 32$
378	The vertex of the equation $y^2 = 4ax$ is:	A. (2, -2) B. (1,1) C. (0 , 0) D. (2 , 2)
379	The line through the focus and perpendicular to the directrix is called _____ of the parabola	A. axis B. focal chord C. tangent D. latus rectum
380	ϱ is a	A. variable B. Positive constant C. Positive variable D. Directrix
381	If the focus lies on the y-axis with coordinates f(0,a) and directrix of the parabola is y = -a, the equation of parabola is:	A. $y^2 = -4ax$ B. $x^2 = 4ay$ C. $x^2 = -4ay$ D. $y^2 = 4ax$
382	A line joining two distinct points on a parabola is called a _____ of the parabola.	A. Chord B. Tangent C. Lust rectum D. directrix
383	I f the focus is F (0,-a) and directrix is the line v=a, then equation of the parabola is:	A. $x^2 = 4ay$ B. $y^2 = 4ax$ C. $y^2 = -4ax$ D. $x^2 = 4ax$
384	y=0 of the parabola $y^2 = 4ax$ is the	A. equation of directirx B. Equatio of the tangent C. Equation of axis D. equation of latus rectum
385	a chord passing through the focus of a parabola is called a:	A. Focal chord B. Latus rectum C. Tangent D. Directrix
386	The distance of point P(x,y) from focus in a parabola $y^2 = 4ax$, is:	A. 2a B. a C. x + a D. x-a
387	If the vertex of the parabola is the origin and directrix is x+5 = 0 . then its latus rectum is:	A. 10 B. 5 C. 0 D. 20
388	The conic is a parabola, when:	A. $\varrho > 1$ B. $\varrho < 1$ C. $\varrho = 1$ D. $\varrho = 0$
389	What is the axis of the parabola $y^2 = 4ax$?	A. x = 0 B. y = 0 C. x = a D. y = 0
390	The axis of the parabola $x^2 = 4ay$ is:	A. y = 0 B. x = 0 C. x = -a D. y = a
391	The parabola y2 + 2y + x = 0 lie in _____ quadrant.	A. First B. Second C. Third D. Fourth
392	The point which is closet to the focus of a parabola is:	A. vertex B. Chord C. Focus D. Directix

393	the curve of the parabola y^2 = -4ax is symmetric with respect to	A. x -axis B. y - axis C. Botha x and y- axis D. None of thes
394	the latus rectum of the parabola x^3 = -4ay is:	A. x = a B. y = -a C. x = -a D. y = 0
395	If ϱ> 1 , then the conic, is:	A. Ellipse B. Parabola C. Hyperbola D. None of these
396	Latus rectum = 4 x _____	A. focal distance of the vertex B. Chord C. Focus D. 1/2
397	Which shape of the following objects are approximately parabolic ares?	A. Light reflectors B. Force C. Weight of the pendul D. None of these
398	Coordinates of the focus of the parabola x^2 - 4x -8y-4=0 are:	A. (0,2) B. (,0,1) C. (2,0) D. (1,2)
399	Co-ordinate of a point on the parabola y^2 = 8x whose focal distance is 4 are:	A. (2 , 4) B. (-2 ,-4) C. (-2, 4) D. (2,-4)
400	The eccentricity of parabola is:	A. 1 B. 0 C. Greater than 1 D. Less than 1
401	The lotus of intersection of perpendicular tangents to the parabola y^2 = 4ax is:	A. Axis of the parabola B. Focal chord of the parabos C. The tangent at vertex of the parabola D. a directrix of the parabola
402	The eccentricity of ellipse becomes zero, then it takes the form of:	A. a parabols B. a straight line C. a circle D. None of these
403	An ellipse slides between two lines at right angles to one another. The locus of its centre is :	A. a parabola B. an ellipse C. a circle D. a hyperbola
404	The locus of the centre of a circle which touches two given circles externally is:	A. a hyperbola B. an ellipse C. a circle D. a parabola