# Ics Part 2 Mathematics Chapter 6 Test Online

| Sr | Questions | Answers Choice |
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| 1 | The conic is an ellipse, if: | A. e = 1<br>B. e > 1<br>C. 0 < e < 1<br>D. e = 0 |
| 2 | If the cutting plane is slightly tillted and cuts only one nappe of the cone, then the section is a / an: | A. Ellipse<br>B. Circular cone<br>C. Circle<br>D. Point circle |
| 3 | Two imaginary tangents can be drawn to a circle from any point $P(x_1, y_1)$ _____ the circle: | A. Inside<br>B. On<br>C. Outside<br>D. None of these |
| 4 | The graph of the parabola $x^2 = -4ay$ lies in quadrants: | A. I and II<br>B. III and IV<br>C. II and III<br>D. I and III |
| 5 | A line segment whose end points lie on the circle is called a _____ of the circle. | A. Radius<br>B. Chord<br>C. Diameter<br>D. None of these |
| 6 | The focus of the parabola $x^2 = 4ay$: | A. (0, a)<br>B. (-a , 0)<br>C. (0, -a)<br>D. (a, 0) |
| 7 | The condition for the line y = mx + c to be a tangent to the circle $x^2 + y^2 = a^2$ is c = _____: | |
| 8 | The opening of the parabola $y^2 = 4ax$ is to the _____ of the: | A. Left<br>B. Upward<br>C. Right<br>D. Downward |
| 9 | 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<br>B. \|CP\| > r<br>C. \|CP\| = r<br>D. None of these |
| 10 | The vertex of the parabola $x^2 = 4ay$ is: | A. (-a, 0)<br>B. (0, a)<br>C. (0, -a)<br>D. (0, 0) |
| 11 | The graph of the parabola $x^2 = -4ay$ is symmetric about: | A. x-axis<br>B. major axis<br>C. y-axis<br>D. minor axis |
| 12 | 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°<br>B. 40°, 100°<br>C. 50°, 90°<br>D. 20°, 120° |
| 13 | Length of tangent from (0,1) to $x^2 + y^2 + 6x - 3y + 3 = 0$ | A. 2<br>B. 1<br>C. 4<br>D. 3 |
| 14 | The parabola $y^2 = 4ax$ lies in quadrants: | A. I and II<br>B. III and IV<br>C. II and III<br>D. I and IV |
| 15 | If the equation of the parabola is $y^2 = -4ax$, then opening of the parabola is to the _____ of the y-axis: | A. Left<br>B. Upward<br>C. Right<br>D. Downward |
| 16 | In the case of rotation of axes which formula is true: | |

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| 17 | The focus of the parabola x2=-4ay is: | A. (-a , 0)<br>B. (0, a)<br>C. (0, -a)<br>D. (a, 0) |
| 18 | The graph of the parabola $y^2$ = -4ax lies in quadrants: | A. I and II<br>B. III and IV<br>C. II and III<br>D. I and III |
| 19 | An angle in a semi-circle is: | A. 0°<br>B. 90°<br>C. 180°<br>D. 60° |
| 20 | If the equation of the parabola is $x^2$ = 4ay, then opening of the parabola is to _____ of the x-axis: | A. Left<br>B. Upward<br>C. Right<br>D. Downward |