# FSC Part 2 Mathematics Chapter 4 Online Test

| Sr | Questions | Answers Choice |
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| 1 | The distance between two points $P_1$ $(x_1, y_1)$ and $P_2$ $(x_2, y_2)$ on the co-ordinate plane is given by: | |
| 2 | The distance of any point P (x, y) from the origin O(0 , 0) is given by: | |
| 3 | The distance between the points (1, 2), (2, 1). | A. 1<br>D. 2 |
| 4 | Question Image | A. 4<br>B. 2<br>C. 1 |
| 5 | Question Image | D. 2 |
| 6 | For any point (x, y) and y - axis: | A. y = 0<br>B. y = -1<br>C. y = 1<br>D. x = 0 |
| 7 | The vertical line y'oy is called: | A. x-axis<br>B. y-axis<br>C. abscissa<br>D. Ordinate |
| 8 | The horizontal line x' ox is called: | A. x-axis<br>B. y-axis<br>C. abscissa<br>D. ordinate |
| 9 | The coordinate axes divide the plane into---------- equal parts: | A. 1<br>B. 2<br>C. 3<br>D. 4 |
| 10 | Distance of the point (-3, 7) from x-axis is: | A. 3<br>B. -3<br>C. 7<br>D. 10 |
| 11 | Distance of the point (-2, 3) from y-axis is: | A. -2<br>B. 2<br>C. 3<br>D. 1 |
| 12 | X-coordinate of any point on Y-axis: | A. 0<br>B. x<br>C. y<br>D. 1 |
| 13 | If (x, y) are the coordinate of a point ordered pair is called: | A. Abscissa<br>B. Ordinate<br>C. Coordinate<br>D. Ordered pair |
| 14 | If (x, y) are the coordinates of a point, then the first component of the ordered pair is called: | A. Abscissa<br>B. Ordinate<br>C. Coordinate axes<br>D. None of these |
| 15 | y-coordinate of any point on X-axis: | A. 0<br>B. x<br>C. y<br>D. 1 |
| 16 | For any point (x, y) on x-axis: | A. y = 1<br>B. y = 0<br>C. y = -1<br>D. y = 2 |
| 17 | If the directed distances AP and PB have same signs, then their ratio is positive and P is said to divide AB: | A. Internally<br>B. May be divide<br>C. Externally<br>D. None of these |

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| 18 | If the directed distances AP and PB have the opposite signs, i.e; p is beyond AB, then their ratio is negative and P is said to divide AB: | A. Internally<br>B. May divide<br>C. Externally<br>D. None of these |
| 19 | If (1, x) is the mid point of the line segment joining the points (1, 2) & (1, 6) then x = | A. 1<br>B. 2<br>C. 3<br>D. 4 |
| 20 | If (2, 1) is the mid point of the line segment joining the points (2, x) & (2, -5) then x = | A. 1<br>B. 2<br>C. 7<br>D. -7 |
| 21 | The point of intersection of the medians of a triangle is called: | A. Centroid<br>B. Ortho-center<br>C. Circums-center<br>D. In-center |
| 22 | The point of intersection of the altitudes of a triangle is called: | A. Centroid<br>B. Ortho-center<br>C. Circums-center<br>D. In-center |
| 23 | The point of intersection of the perpendicular bisectors of a triangle is called: | A. Centroid<br>B. Ortho-center<br>C. Circums-center<br>D. In-center |
| 24 | The point of intersection of internal bisectors of the angles of a triangle is called: | A. Centroid<br>B. Ortho-centers<br>C. Circums-center<br>D. In-center |
| 25 | The centroid of a triangle is a point that divides each median in the ratio: | A. 2 : 1<br>B. 2 : 3<br>C. 1 : 3<br>D. 4 : 3 |
| 26 | X-co-ordinate of centroid of triangle ABC with A(-2, 3); B(-4, 1); C(3, 5) equals: | A. -1<br>B. 1<br>C. 3<br>D. -3 |
| 27 | y - ordinate of the centroid of triangle with vertices A(-2, 3) B(-4, 1), C(3, 2) is: | A. 3<br>B. 1<br>C. 2<br>D. 0 |
| 28 | The ratio in which the line segments joining (2, 3) and (4, 1) is divided by the line joining (1, 3) and (4, 3) is: | A. 2 : 1<br>B. 3 : 1<br>C. 1 : 2<br>D. 1 : 1 |
| 29 | The ratio in which y-axis divides the line joining (2, -3) and (-5, 6) is: | A. 2 : 3<br>B. 2 : 5<br>C. 1 : 2<br>D. 3 : 5 |
| 30 | The ratio in which x-axis divides the line segment joining the points: | A. 1 : 1<br>B. 1 : 3<br>C. 1 : 5<br>D. 1 : 2 |
| 31 | In the translation of axes which formula is true: | A. x = X + h<br>B. X = x + h<br>C. x + X = h<br>D. None |
| 32 | If in the case of translation of axes, O (-3, 2), (x, y) = (-6, 9) then (X, Y) = | A. (-3, 9)<br>B. (-3, 7)<br>C. (-9, 11)<br>D. (3, 7) |
| 33 | Question Image | A. Parallel lines<br>B. Perpendicular lines<br>C. Non-parallel lines<br>D. None of these |
| 34 | The symbol \|\| is used for: | A. Parallel lines<br>B. Perpendicular lines<br>C. Non-parallel lines<br>D. None of these |
| 35 | Question Image | A. Parallel lines<br>B. Non-parallel lines<br>C. Perpendicular lines<br>D. Coplanar lines |

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| 36 | If a pair of opposite sides of a quadrilateral are equal and parallel then it is: | A. Rectangle<br>B. Rhombus<br>C. Parallelogram<br>D. None of these |
| 37 | A parallelogram is a rhombus if and only if its diagonals are: | A. Parallel<br>B. Perpendicular<br>C. Equal<br>D. None of these |
| 38 | A quadrilateral having two parallels and two non-parallel sides is called: | A. Trapezium<br>B. Rectangle<br>C. Rhombus<br>D. None of these |
| 39 | If the inclination of a line lies between ]90°, 180°[, then the slope of line is : | A. Positive<br>B. Negative<br>C. Zero<br>D. undefined |
| 40 | If the inclination of the line l lies between ]0°, 90°[, then the slope of l is: | A. Positive<br>B. Negative<br>C. Undefined<br>D. None of these |
| 41 | If the lien l is parallel to y-axis, then the slope of l is ----------. | A. 0<br>B. 1<br>C. -1<br>D. undefined |
| 42 | Inclination of X-axis or of any line parallel to X-axis is: | A. Zero<br>D. Undefined |
| 43 | The line l is horizontal if and only if slope is equal to: | A. 0<br>B. 1<br>C. 2<br>D. undefined |
| 44 | Inclination of Y-axis or of any line parallel to Y-axis is: | B. Zero<br>D. Undefined |
| 45 | If a straight line is perpendicular to y-axis, then its slope is: | A. 1<br>B. -1<br>C. 0<br>D. undefined |
| 46 | If a straight line is perpendicular to x-axis, then its slope is: | A. 0<br>B. 1<br>C. 2<br>D. Undefined |
| 47 | Question Image | A. Line parallel to x-axis<br>B. Line parallel to y-axis<br>C. Line passing through the origin<br>D. Both (a) and (b) |
| 48 | Question Image | A. Line parallel to x-axis<br>B. Line parallel to y-axis<br>C. Line passing through the origin<br>D. Both (a) and (b) |
| 49 | Question Image | A. Line parallel to x-axis<br>B. Line parallel to y-axis<br>C. Line passing through the origin<br>D. Both (a) and (b) |
| 50 | Question Image | A. Line parallel to x - axis<br>B. Line parallel to y - axis<br>C. Inclined<br>D. Both (a) and (b) |
| 51 | Question Image | |
| 52 | Infinite number of lines can pass through: | A. One point<br>B. Two points<br>C. Three points<br>D. Four points |
| 53 | The line x = a is on the right of y - axis if: | A. a > 0<br>B. a < 0<br>C. a = 0 |
| 54 | y = -2 is a line: | A. Parallel to x-axis<br>B. Parallel to y-axis<br>C. Perpendicular to x-axis<br>D. None of these |

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| 55 | Equation of a line parallel to x-axis: | A. x = 0<br>B. x = y<br>C. y = a<br>D. x = a |
| 56 | If a = 0, then the line ax + by + c = 0 is parallel to: | A. y - axis<br>B. x - axis<br>C. along y - axis<br>D. None of these |
| 57 | The line y = c is above the x - axis, if: | A. c > 0<br>B. c < 0<br>C. c = 0 |
| 58 | x = 4 is a line: | A. Parallel to x - axis<br>B. Parallel to y - axis<br>C. Perpendicular to y-axis<br>D. None of these |
| 59 | x = c is a line: | A. Perpendicular to x-axis<br>B. Parallel to x-axis<br>C. Perpendicular to y-axis<br>D. None of these |
| 60 | y - y1 = m ( x - x1) is the equation of straight line in: | A. Slope-intercept from<br>B. Point-slope from<br>C. Normal form<br>D. Intercepts form |
| 61 | y = mx + c is the equation of straight line in: | A. Slope-intercept form<br>B. Two points from<br>C. Point slope form<br>D. Intercepts form |
| 62 | y = 2x + 3 is the; | A. Slope-intercept form<br>B. Two points form<br>C. Point slope form<br>D. Intercepts form |
| 63 | The equation to the straight line which passes through the point (2, 9) and makes an angle of 45° with x-axis is: | A. x + y + 7 = 0<br>B. x - y + 7 = 0<br>C. y - x + 7 = 0<br>D. None of these |
| 64 | General form of equation of line is: | A. ax - by + c = 0<br>B. ax + by - c = 0<br>C. ax + by + c = 0<br>D. ax - by - c = 0 |
| 65 | The equation of a straight line which parallel to the line 3x - 2y + 5 = 0 and passes through (2, -1) is: | A. 3x + 2y - 8 = 0<br>B. 3x - 2y + 8 = 0<br>C. 3x - 2y - 8 = 0<br>D. 3x + 2y + 8 = 0 |
| 66 | The perpendicular distance of the line 3x + 4y + 10 = 0 from the origin is: | A. 0<br>B. 1<br>C. 2<br>D. 3 |
| 67 | The point (5, 8) lies the line 2x - 3y + 6 = 0 | A. Above<br>B. Below<br>C. On<br>D. None |
| 68 | The point (2, 5) lies the lie 3x - y + 1 = 0 | A. Above<br>B. Below<br>C. On<br>D. None |
| 69 | The line y = a is below the x-axis, if: | A. a > 0<br>B. a < 0<br>C. a = 0 |
| 70 | Angle between the lines x + y + 1 = 0 & x - y + 4 = 0 is: | A. 30°<br>B. 45°<br>C. 60°<br>D. 90° |
| 71 | Point of intersection of lines x - 2y + 1 = 0 and 2x - y + 2 = 0 equals: | A. (1, 0)<br>B. (0, 1)<br>C. (-1, 0)<br>D. (0, -1) |
| 72 | Point of intersection of x + y = 5 & x - y = 3 is: | A. (5, 5)<br>B. (4, 2)<br>C. (4, 1)<br>D. (1, 4) |
| | | A. 0 |

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| 73 | Question Image | B. 2<br>C. 1<br>D. -1 |
| 74 | ax + by + c = 0 has matrix from as: | B. \|ax + by\| = \|-c\|<br>C. [ax + by ] = [c]<br>D. [ax - by] = [-c] |
| 75 | The pair of lines of homogeneous second-degree equation $ax^2 + 2hxy + by^2 = 0$ are real and coincident, if: | A. h<sup>2</sup> < ab<br>B. h<sup>2</sup>> ab<br>C. h<sup>2</sup>= ab<br>D. None of these |
| 76 | A pair of lines of homogeneous second degree equation $ax^2 + 2hxy + by^2 = 0$ are othogonal, if: | A. a - b = 0<br>B. a + b = 0<br>C. a + b > 0<br>D. a - b < 0 |
| 77 | Joint equation of y + 2x = 0, y - 3x = 0 is: | A. (y+2x)(y-3x) = 0<br>B. (y-2x)(y-3x) = 0<br>C. (y+2x)(y+3x) = 0<br>D. (y-2x)(y+3x) = 0 |
| 78 | ax + by + c = 0, will represent equation of straight line parallel y-axis if: | A. a = 0<br>B. b = 0<br>C. c = 0<br>D. a = 0, c = 0 |
| 79 | The centroid of the triangle whose vertices are (3, -5), (-7, 4) and (10, -2) is: | A. (-2, -2)<br>B. (-2, 2)<br>C. (2, -1)<br>D. (0, 0 ) |
| 80 | A linear equation in two variables represents: | A. Circle<br>B. Ellipse<br>C. Hyberbola<br>D. Straight line |
| 81 | Equation of the line parallel to x + 3y - 9 = 0 is: | A. 3x - y - 9 = 0<br>B. 3x + 9y + 7 = 0<br>C. 2x - 6y - 18 = 0<br>D. x - 3y + 9 = 0 |
| 82 | Two non parallel lines intersect each other at: | A. 1 point<br>B. 2 points<br>C. 3 points<br>D. 4 points |