1mark questions

Q.1. The distance of the point (3, 4) from x -axis is

A	1	B	3	C	2	D	4

Q.2. If x > 0 and y < 0, then the point (x, y) lies in .... quadrant.

A	Second	B	Fourth	C	First	D	Third

Q.3. If the coordinates of the point P are (8, -5) ,then the perpendicular distance of P from the y - axis is

A	8	B	-8	C	-5	D	5

Q.4. In the ordered pair (a,- 12) , if the second member of the pair is 4 times more than the first member, then the missing member 'a ' a is

A	3	B	-4	C	-3	D	4

Q.5. Image of point (0 ,3) about x -axis is

A	(-3,3)	B	(-3,0)	C	(0, -3)	D	(3,0)

Q.6. What would be the coordinates of point S for points P,Q,R and S to form a parallelogram?

A	(3,-1)	B	(2,-2)	C	(4,-2)	D	(2,-1)

Q.7. In which quadrant abscissa is negative and ordinate is positive?

A	II	B	I	C	IV	D	III

Case study-based question (1 x 4 = 4 marks)

Q.8. Ant is a hard working insect. It can lift weight heavier than its own. An ant comes out of its hole and notices grains lying at the points P, Q, A, C, E, R, U, T and S and at their mirror images. The co-ordinates are P(-4,0), Q(-3,0), A(-2,2), C(-1,1), E(0,3), R(1,0), U(3,0.5), T(3,1) and S(3,1.5).
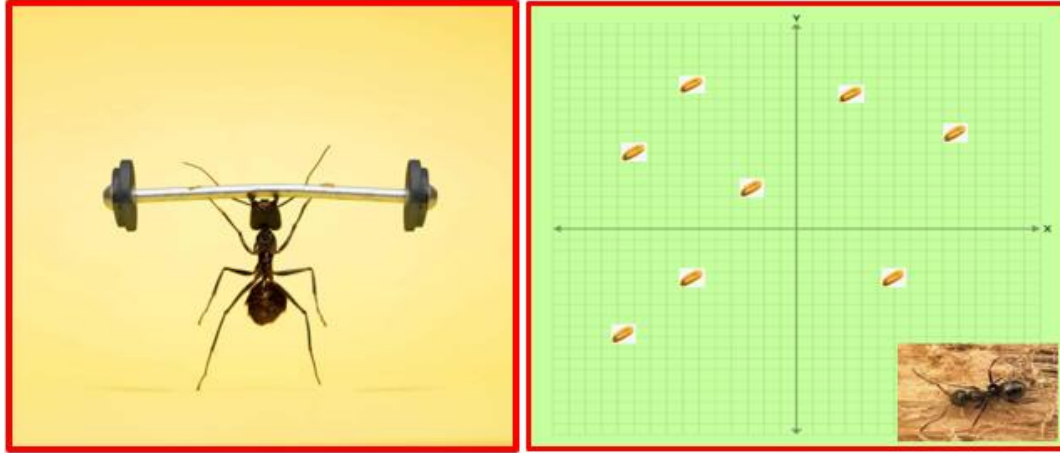
(i) Plot the points P, Q, A, C, E, R, U, T and S. Write the points lying on x-axis.

A	P, Q and E	**B**	P, A and E	**C**	A, Q and E	**D**	P,Q and R

(ii) Plot the mirror images of the points A, C and E. Name it as B, D and F respectively from x-axis. Then co-ordinates of B, D and F are

A	B(2,-2), D(1,-1), F(-3,0)	**B**	B(-2,-2), D(-1,-1), F(0,-3)	**C**	B(2,-2), D(-1,-1), F(0,-3)	**D**	B(0,-2), D(0,-1), F(0,-3)

(iii) Join PA, PB, AB. Find the area of the polygon so formed.

A	8 cm^2	**B**	6 cm^2	**C**	4 cm^2	**D**	2 cm^2

(iv) Plot the mirror images of the points S, T and U as X, W and V from x-axis.

Observe the points S,T,U,V,W and X. What do you get?

A	Collinear points	**B**	Non-collinear points	**C**	Circle	**D**	Hexagon

2 marks questions

Q.9. A policeman and a thief are equidistant from the jewel box. Upon considering the jewel box as the origin, the position of policeman is (0,5). If the ordinate of the position of the thief is zero, then what will be the position of the thief ?

Q.10. Name the figure formed by joining the points (4,0) and (0,4) in a cartesian plane.

Q.11.	Which of the following point lie (i) on x-axis? (ii) on y-axis? A(0,2), B(5,0), C(23,0), D(0,-12), E(0,9), F(6,0), G(3,0).
Q.12.	In the co-ordinate plane, draw a square of side 5 units, taking origin as one vertex. Also, write the co-ordinates of its vertices.
Q.13.	Draw line segment AB for the two points A(-2,2), B(2,-2) on the graph paper and find its mid-point.

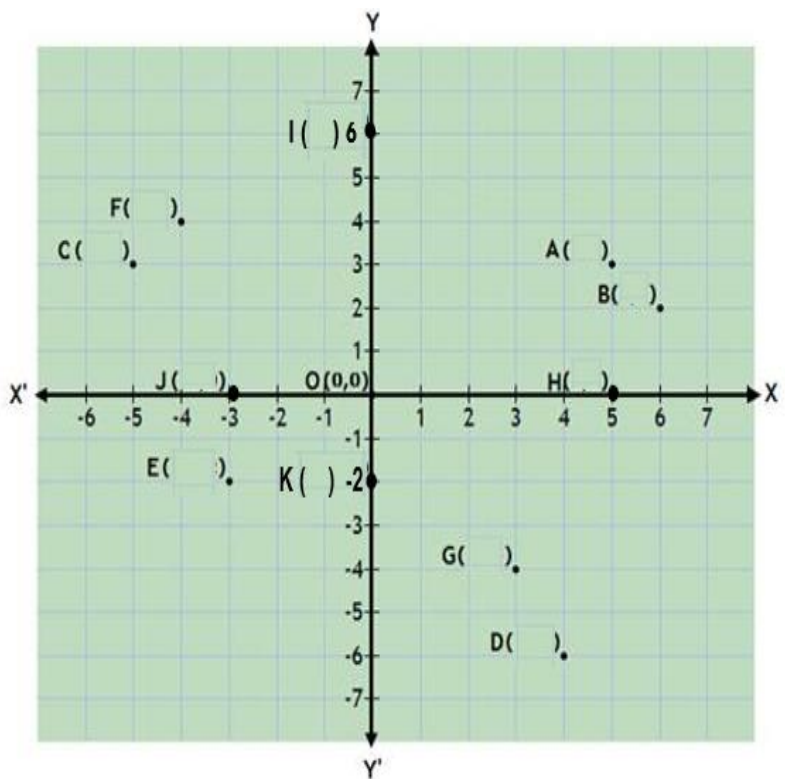**3 marks questions**

Q.14.	(i) Plot the points M(5,-3) and N(-3,-3). (ii) What is the length of MN? (ii) Find the co-ordinates of points A, B and C lying on MN, such that : MN = AB = BC = CN.

Q.15.

Plot the points(x, y) given in the following table on the plane, choosing suitable units of distance on the axes.

x	-2	-4	0	5	-8
y	8	7	-2.5	1	-3

Q.16.

From the adjoining graph write the following.

(i) The coordinates of B and I.

(ii) The abscissa of the points D and G.

(iii) The co-ordinates of the points H and J.

(iv) The points identified by the coordinates (0,-2) and (-3,-2).

(v) The ordinate of the points A and F.

(vi) The coordinates of C.

Q.17.	Write the co-ordinates of the point A, B, C, D, E and F of the figure formed on the graph. Join AC and DF also, write the co-ordinates of the points of intersection of AC and DF with the x-axis.
Q.18.	The three vertices of a rectangle are (3,2), (-4,2) and (-4,5). Plot these points on the graph. Find the coordinates of the fourth vertex and the area of the rectangle so formed.
Q.19.	Write the co-ordinates of a point (i) above the x-axis lying on the y-axis at a distance of 3 units. (ii) below the x-axis and on the y-axis at a distance of 8 units. (iii) right of origin and on the x-axis at the distance of 2 units.
Q.20.	Find the value of x and y, if (i) $(x + 4, 5) = (5, y)$ (ii) $(-6, 2y - 3) = (x, 11)$ (iii) $(3x + 5, -8) = (11, y+1)$
	5 marks questions
Q.21.	In the given figure, ΔABC and ΔADC are equilateral triangles on common base AC, each side of triangles being 2a units. Vertices A and C lies on x-axis, vertices B and D lies on Y-axis, O is the mid-point of AC and BD. Find the co-ordinates of the point B.

Q.22.	From the adjoining graph write the following. (i) The Co-ordinates of point C (ii) The abscissa of point E (iii) The ordinate of the point F (iv) Co-ordinates of point O (v) The perpendicular distance of the point A from the x -axis (vi) The perpendicular distance of the point B from the y -axis is	
Q.23.	(a) Plot the points and give the abscissa and ordinate for each of P(-1,0), Q(3,-3), R(0,6). (b) Write the ordered pairs , if: (i) ordinate is 5 and abscissa is 8 less than ordinate. (ii) sum of both members is -2 and abscissa is -5. (iii) abscissa is -3 and ordinate is -5.	

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Answers

Answers	**Q.1**	D	**Q.2**	B	**Q.3**	A	**Q.4**	C	
	Q.5	C	**Q.6**	D	**Q.7**	A	**Q.8**	(i) D (ii) B	
	Q.8	(iii) C (iv) A	**Q.9**	(5,0) or (-5,0)	**Q.10**	Right angled triangle	**Q.11**	(i)B, C, F and G (ii)A, D and E	
	Q.12	One of the answers: (0,0),(5,0),(5,5) and (0,5).	**Q.13**	Origin (0,0)	**Q.14**	(ii) 8 units (iii) A(3,-3), B(1,-3), C(-1,-3)	**Q.16**	(i)B(6,2),I(0,6) (ii)D(4), G(3) (iii)H(5,0),J(-3,0) (iv) K and E (v)A(3), F(4) (iv)C(-5,3)	
	Q.17	Intersection with x axis (-3,0) (4.5,0)	**Q.18**	(3,5) 35 sq. units	**Q.19**	(0,3) ,(0,-8) (2,0)	**Q.20**	(i) x = 1, y = 5 (ii) x = -6, y = 7 (iii) x = 2, y = -9	
	Q.21	B(0, a√3)	**Q.22**	(i)C(-5,3) (ii)E(0) (iii)F(-5) (iv)(0,0)	**Q.22**	(v)6 units (vi)7 units	**Q.23**	Abscissa—1,3,0 Ordinate-0,-3,6 (i)(-3,5)(ii)(-5,3) (iii) (-3,-5)	