Long Answer Type Questions

[4 MARKS]

Que 1. Write the coordinates of the vertices of a rectangle whose length and breadth are 6 and 3 units respectively, one vertex at the origin, the longer side lies on the longer side lies on the y-axis and one of the vertices lies in the second quadrant.

Sol. $(0,0),(0,6),(-3,6),(-3,0)$ (See Fig. 4.10)

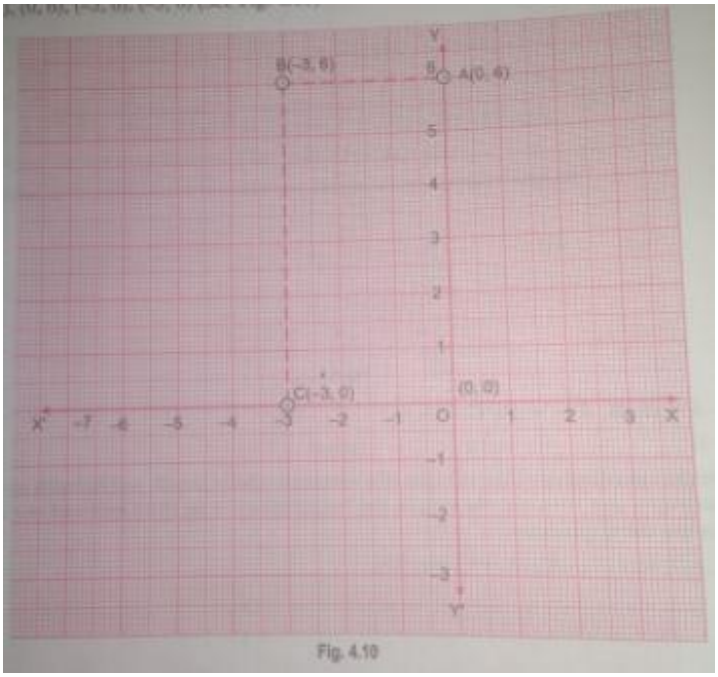

Fig. 4.10

Que 2. From Fig. 4.11, answer the following:

(i) Coordinates of point C.
(ii) The point identified by the coordinates $(-3,-7)$.
(iii) The abscissa of the point E.
(iv) The ordinate of the point F.
(v) Coordinates of point O.
(vi) The quadrant in which point G lies.
(vii) The perpendicular distance of the point A from the x-axis.
(viii) The perpendicular distance of the point B from the y-axis.

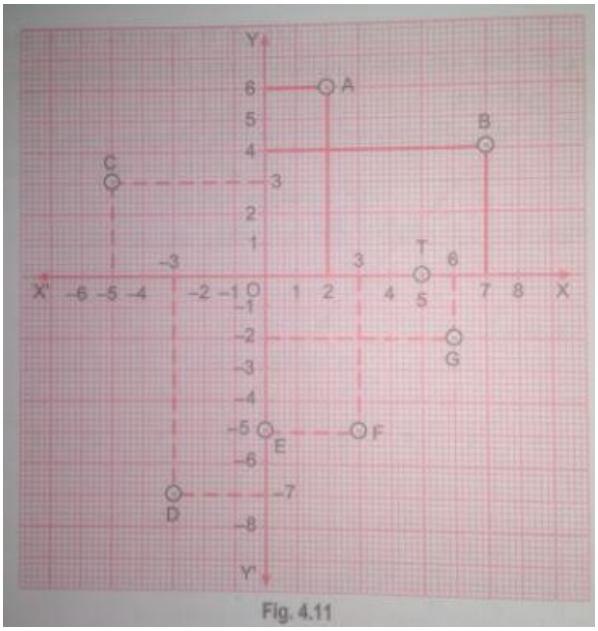

Fig. 4.11

Sol. (i) $(-5, 3)$ $(ii) D$ (iii) 0 $(iv) -5$

(v) $(0, 0)$ (vi) Fourth (vii) 6 units $(viii)$ 7 units

Que 3. Plot the following points and check whether they are collinear of not:

$(\boldsymbol{i})$ $(\mathbf{2}, \mathbf{3}), (\mathbf{3}, \mathbf{2}), (\mathbf{1}, -\mathbf{5})$

$(\boldsymbol{ii})$ $(-\mathbf{1}, \mathbf{1}), (-\mathbf{3}, \mathbf{3}), (-\mathbf{5}, \mathbf{5})$

Sol. (i)

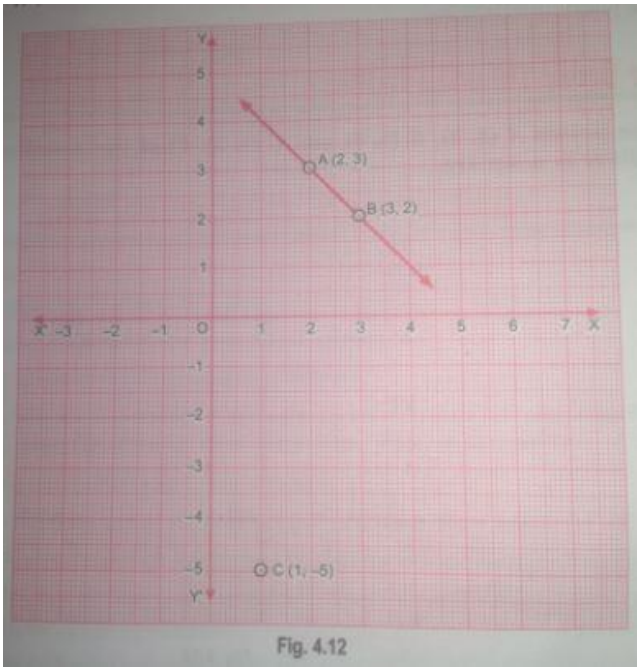

Fig. 4.12

The points are non-collinear.

(ii)

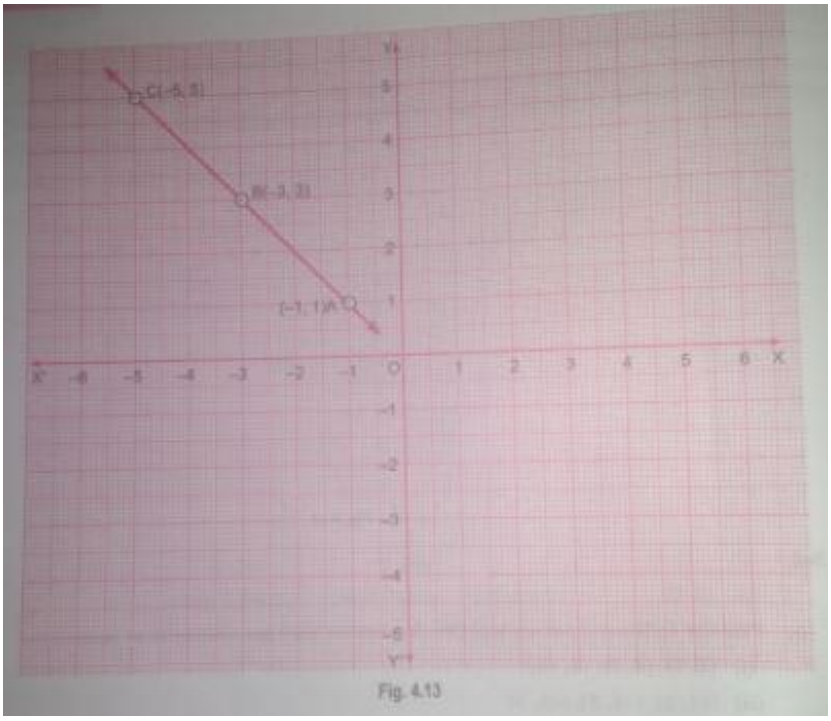

Fig. 4.13

Yes, the points are collinear.