Exercise 14G

Question 1:
(i) Arranging the data in accending order, we have
2,2,3, 5, 7, 9, 9, 10, 11
Here n = 9, which is odd

$$\text{median} = \frac{1}{2}(n+1)\text{th term}$$
$$= \frac{(9+1)}{2}\text{th term}$$
$$= \text{value of the 5th term}$$
$$= 7$$
$$\therefore \text{median} = 7$$

(ii) Arranging the data in ascending order , we have
6, 8, 9, 15, 16, 18, 21, 22, 25
Here n = 9, which is odd

$$\text{median} = \frac{1}{2}(n+1)\text{th term}$$
$$= \frac{(9+1)}{2}\text{th term}$$
$$= \text{value of the 5th term}$$
$$= 16$$
$$\therefore \text{median} = 16$$

(iii) Arranging data in ascending order:
6, 8, 9, 13, 15, 16, 18, 20, 21, 22, 25
Here n = 11 odd

$$\text{median} = \frac{1}{2}(n+1)\text{th term}$$
$$= \frac{(11+1)}{2}\text{th term}$$
$$= \text{value of the 6th term}$$
$$= 16$$

Therefore, median = 16

(iv) Arranging the data in ascending order , we have
0, 1, 2, 2, 3, 4, 4, 5, 5, 7, 8, 9, 10
Here n = 13, which is odd

median $= \frac{1}{2}(n+1)$th term

$\qquad = \frac{(13+1)}{2}$ th term

$\qquad$ = value of the 7th term

$\qquad$ = 4

$\therefore$ median = 4

********** END *********