

Ans/6

Median and Median class of the following data:

C.I	f	cumulative f
15-25	5	5
25-35	10	15
35-45	18	33
45-55	15	48
55-65	0	48
65-75	3	51
	$N = 51$	

Median = ~~xi~~ value of  $N/2$

$$51/2 = 25.5$$

Median lies in 35-45

$$L_1 = 35, f = 18, C.f = 15, i = 10$$

$$\text{formula} = L_1 + \frac{N/2 - C.f}{f} \times i$$

$$= 35 + \frac{25.5 - 15}{18} \times 10$$

$$= 35 + \frac{25.5 - 15}{18} \times 10$$

$$= 35 + \frac{10.5}{18} \times 10$$

$$= 35 + \frac{105}{18} \times 5.83$$

$$= 35 + 5.83$$

$$= 40.83 \text{ ans}$$