

Mathematics

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(Chapter – 13) (Statistics & Probability)(Exemplar Problems)
(Class – X)

Exercise 13.1

Choose the correct answer from the given four options:

Question 7:

Consider the following frequency distribution

Class	0 – 5	5 – 11	12 – 17	18 – 23	24 – 29
Frequency	13	10	15	8	11

The upper limit of the median class is

- (A) 17 (B) 17.5 (C) 18 (D) 18.5

Answer 7:

- (B) 17.5

Solution:

Given classes are not continuous, so we continuous by subtracting 0.5 from lower limit and adding 0.5 to upper limit of each class.

Class	Frequency	Cumulative Frequency
0.5 – 5.5	13	13
6.5 – 11.5	10	23
11.5 – 17.5	15	38
17.5 – 23.5	8	46
23.5 – 29.5	11	57

Here,

$$\frac{N}{2} = \frac{57}{2} = 28.5,$$

Which lies in the interval 11.5 – 17.5

Hence, the upper limit is 17.5

Hence, the option (B) is correct.

