STD X

STATISTICS

1.Transport department of a city wants to buy some Electric buses for the city. For which they wants to analyse the distance travelled by existing public transport buses in a day.

The following data shows the distance travelled by 60 existing public transport buses in a day.

Daily distance travelled (in km)	**100-109**	**110-119**	**120-129**	**130-139**	**140-149**
Number of buses	**14**	**4**	**23**	**13**	**6**

Based on the above information, answer the following questions.

(i) The upper limit of a class and lower limit of its succeeding class differ by

(a) 9 (b) 1 (c) 10 (d) 0

(ii) The median class is

(a) 129.5-139.5 (b) 130-139 (c) 120-129 (d) 119.5-129.5

(iii) The cumulative frequency of the class preceding the median class is

(a) 14 (b) 18 (c) 26 (d) 10

(iv) The median of the distance travelled is

a) 122 km b) 123 km c) 124 km d) 125 km

2. If mean of 1,2 ,3 ….. n is $\frac{6n}{11}$ then determine the value of n

a) 10 b) 11 c) 12 d) 13

3.If mean = (3median - mode)k then find the value of k

a) 1 b) 2 c) 1/2 d) 3/2

4.The mean score of 20 observations is 80 and the mean score of another 20 observations is 40. Find the mean score of whole set of observations.

a) 60 b) 50 c) 70 d) 80

5. Assertion : In a frequency distribution, the mid value of the class is 9 and the class width is 2. The upper limit of the class is 8.

Reason: Mid value of a class = $\frac{upper\ limit+lower\ limit}{2}$

a) Both assertion and reason are true and reason is the correct explanation of assertion

b) Both assertion and reason are true but reason is not the correct explanation of assertion

C) Assertion is true but reason is false.

d) Assertion is false and reason is true.

ANSWER KEY

POLYNOMIALS

1. a) 2
   b) 3,1
   c) 18
      0

2. a)
3. -4

4. -c/a
5. -7/6

STATISTICS

1. b) 1
   d) 119.5 – 129.5
   b) 18
   d) 125km
2. b) 11
3. c) ½
4. a) 60
5. d)