

MATHEMATICS (General)

Paper: MATH-G- SEC03

Time:- 1 h.

Full Marks:- 14

1. Answer the following questions:

$$3 \times 2 = 6$$

(a) Find the s.d. of the following observations: 2, 3, 5, 6, 8, 7, 10, 12

(b) Find the mode of the following distribution:

x : 1 2 3 4 5 6

f : 2 4 6 6 3 1

(c) Find the mean of the first n natural numbers.

2. Answer the following questions:

$$2 \times 4 = 8$$

(a) The mean of 5 observations is 4.4 and their variance is 8.24. If 3 of the observations are 4, 6, 9, find the other two.

(b) In a frequency distribution, the first four central moments are: 0.0, 2.5, 0.7 and 18.75 respectively. Find the skewness and kurtosis and hence explain the nature of the distribution.

Signature of the Investigator (2)