

Ques Setter	
Moderator	
VP	

Subject Code:

1	2	9
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Set:

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[N.B. – Answer all the questions. Each question carries ONE mark. Block fully, with a black ball- point pen, the circle of the letter that stands for the correct/best answer in the “Answer sheet” for the Multiple Choice Questions Examination.]

Candidates are asked not to leave any mark or spot on the question paper.

1. The second central moment of the natural numbers 1 through 12 is –
- (a) 12.93

(b) 11.92

(c) 10.94

(d) 12.60

Answer the next THREE questions based on the following information

The arithmetic mean, Pearson’s coefficient of skewness, and coefficient of variation of a distribution are 50, -0.4, and 40 %, respectively.

2. What is the standard deviation?
- (a) 50

(b) 20

(c) 30

(d) 40
3. The Mode is –
- (a) 45

(b) 50

(c) 60

(d) 58
4. The Median is
- (a) 52.67

(b) 5

(c) 20

(d) 10.39
5. $\beta_2 = \sqrt{9}$ implies data are–
- (a) Leptokurtic

(b) Platykurtic

(c) Mesokurtic

(d) Symmetric
6. The moments around the origin are called –
- (a) Central moments

(b) Raw moments

(c) First moment

(d) Measures of dispersion
7. The Range of Karl Pearson’s measure of skewness –
- (a) (0, 1)

(b) (-1, 1)

(c) (-3, 3)

(d) (0, ∞)

Answer the next two questions based on the following information

The first and second moments of a distribution around 2 are 13 and 195, respectively.

8. What is the arithmetic mean?
- (a) 15

(b) 12

(c) 11

(d) 26
9. What is its variance?
- (a) 20

(b) 21

(c) 26

(d) 25
10. $\gamma_1 = 0.43$ implies–
- (a) Left Skew

(b) Symmetry

(c) Right Skew

(d) Mesokurtic
11. What is the purpose of moments?
- (a) To find the center of data

(b) To find dispersion

(c) To find relationship between skewness and kur-

(d) To uniquely identify a distribution
12. The mean of a variable is 3.2. Find the first raw moment around 0.
- (a) 3.2

(b) -3.2

(c) 0

(d) 1.2

13. **The five-number summary of a data set consists of the following:**
- i. Minimum value
 - ii. Maximum value
 - iii. Median (Q2), First Quartile (Q1), Third Quartile (Q3)
- Which one is correct?**
- (a) i and ii (b) i and iii (c) ii and iii (d) i, ii and iii
14. **What kind of distribution is clustered around the mean?**
- (a) Left-skewed (b) Symmetrical (c) Right-skewed (d) None of the above
15. **In a negatively skewed distribution –**
- i. there is a long tail on the left
 - ii. median is greater than mean
 - iii. high values have frquencies
- Which one is correct?**
- (a) i and ii (b) i and iii (c) ii and iii (d) i, ii and iii