

CLASS –XI

SUBJECT -ECONOMICS

ASSIGNMENT- 3 TOPIC - MEASURE OF CENTRAL TENDENCY AND POSITIONAL VALUES

1 mark question to be answered in one word/one sentence

- Q1. Define an average .
- Q2. What is meant by 'Central Tendency'?
- Q3. State two function of an average.
- Q4. Name three measures of central tendency.
- Q5. Give for formula Weight Arithmetic Mean.
- Q6. What is Arithmetic Mean.
- Q7. Name two types of arithmetic mean.
- Q8. What is median?
- Q9. What are quartiles?
- Q10. What are percentiles?
- Q11. What are partition Values?
- Q12. What is mode?
- Q13. Give the formula for finding the median in case of continuous series..
- Q14. Give the formula for finding mode of a continuous series.
- Q15. Age of 5 students is 22, 24,26,21,20.Find the modal age.
- Q16. State the relative position of Mean median and Mode a) in a moderately asymmetrical distribution b)in a symmetrical distribution.

Q17. Find the mean marks obtained by five students-45,50,55,35,50

Q18. Locate the Mode- 1,2,3,4,4,5

Q19. Locate the Median value – 12,6,18,14,8

Q20. Locate the Median Value- 12,6,18,14,8,10

Q21. Locate the First Quartile- 12,6,18,14,8

Q22. Locate the Upper Quartile- 12,6,18,14,8

Q23. Complete the following formula;

$$X=A+ fdx ?$$

Q24. Give the formula for calculating arithmetic average of a continuous series with assumed mean,

Q25. How are quartiles calculated in a continuous series?

Q26. Calculate median in a moderately asymmetrical distribution if mode is 83 and arithmetic mean is 92 .

Q27. If mode the median are 63 and 67 respectively, calculate arithmetic mean.

Q28. Values of median and mean are 26 and respectively, calculate mode.

Q29. Can mode be located graphically?

Q30. How is arithmetic mean of a grouped frequency distribution Calculated? Explain with the help of direct and indirect methods.

Q31. The median of a series is 10. Two additional observations, 7 and 20 are added to the series. What will be median of new series?

Q32. If the arithmetic mean of a series is 28, what will be the resultant mean if each item of the series is increased by 3, decreased by 5, divided by 4 or multiplied by 10

- Q33. Average daily wage of 50 workers of a factory was Rs.200. each worker is given a raise of Rs.20 What is the new average daily wage?
- Q34. Show that the algebraic sum of deviations of given set of a given set of observations from their mean is zero.
- Q35. Explain any one disadvantage of arithmetic mean as a measure of central tendency.
- Q36. What relationship exists between Mean , Median and Mode in case of a symmetrical distribution?
- Q38. What relationship exists between X, M and Z in a moderately negative skewed distribution?
- Q39. Define upper quartile.
- Q40. Define lower quartile.
- Q41. In a town 25% of the person earned more than Rs.45000 whereas 75% earned more than Rs. 18000. Calculate Q1 and Q3.

(3/4 Marks)

- Q1. Explain the characteristics of a good average.
- Q2. What is arithmetic mean? Write two merits of arithmetic mean.
- Q3. Mention any three merits of Median
- Q4. Define Mode. What are its merits?
- Q5. "Arithmetic Mean is affected by very large and very small values but Median and mode are not affected by them." Explain.
- Q6. Show the sum of deviations of the value of variables from their arithmetic mean is equal to zero.
- Q7. Compare Mean, Median and Mode as measures of Central Tendency
- Q8. Comment whether the following statements are true or false:

- (i) The sum of deviation of items from median is zero.
- (ii) An average alone is not enough to compare series.
- (iii) Arithmetic mean is a positional value.
- (iv) Upper quartile is the lowest value of top 25% of items.
- (v) Median is unduly affected by extreme observations.