## 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 is83 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.