A. Measure of Central Tendency

a. Abhi owns a small business that employs 5 other people. Abhi makes ₹100,000 per year, and the other 5 employees make between ₹40,000 and ₹50,000 per year.
   Abhi decides to increase his salary by ₹30,000 per year and leave the rest of the salaries the same.
   How will increasing his salary affect the mean and median?
   - i. Both the mean and median will increase.
   - ii. The mean will increase, and the median will stay the same.
   - iii. The median will increase, and the mean will stay the same.
   - iv. The mean will increase, and the median will decrease.

b. Which central tendency is better for imputation of missing data in categorical dataset?
   - i. Mean
   - ii. Median
   - iii. Mode
   - iv. None of the above

c. Which central tendency is better for imputation of missing data in continuous dataset?
   - i. Mean
   - ii. Median
   - iii. Mode
   - iv. None of the above

B. Measure of position

a. It is a measure of position that divides the distribution into ten equal parts
   - i. Decile
   - ii. Quartile
   - iii. Percentile
   - iv. Tentiles

b. The Median of the Decile values is:
   - i. D3
   - ii. D5
   - iii. D2
   - iv. D8

c. In finding the D8 of Lance's score in Mathematics for the Third Quarter, he got the score 20. What does it mean?
   - i. 8% of his scores are less than or equal to 20
   - ii. 88% of his scores are less than or equal to 20
   - iii. 80% of his scores are less than or equal to 22

       iv.   80% of his scores are less than or equal to 20

d. What measures of position divides the distribution into 100 equal parts?
  i. Decile
  ii. Quartile
  iii. Percentile
  iv. Tentiles

e. The median is equivalent to
  i. the middle quartile (Q2)
  ii. the fifth decile (D5)
  iii. the 50th percentile (P50)
  iv. All of above

C. Outlier

a. The data set below has an outlier of 42.
  2, 5, 12, 15, 19, 4, 6, 11, 16, 18, 12, 12, 42
  What effect does removing the outlier have on the distribution of the data?
  i. The mean will decrease
  ii. The median will decrease
  iii. The mean will increase
  iv. The median will increase

b. The data set is shown below.
  56, 64, 73, 59, 98, 65, 59
  If the outlier is removed from the data set, which measure of central tendency will be least affected?
  i. Range
  ii. Mean
  iii. Mode
  iv. Median

D. Boxplot

a. Construct a box plot for the following data set.
  3, 5, 8, 8, 9, 11, 12, 12, 13, 13, 16

b. Boxplot is also called as
  i. Bubble plot
  ii. Scatter plot
  iii. Whisker's plot
  iv. None
c. Refer to the data set and solve in Google sheet