| Part | sub/obj | Marks | Question | Answer Option 1 | Answer Option 2 | Answer Option 3 | Answer Option 4 | $\begin{array}{\|l\|} \hline \text { Correct } \\ \text { Answer(A/B } \\ \hline \text { /C/D) } \\ \hline \end{array}$ | CO | Bloom's Taxonom y Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | obj | 1 | Arithmatic Mean of 31, 35, 38, 39, 42 | 32 | 37 | 35 | 42 | B | CO1 | L1, L2, L3 |
| A | obj | 1 | The industrial growth during the past decade is best represented by | histogram | bar graph | line chart | all the above | C | CO1 | L1, L2 |
| A | obj | 1 | The depiction of data in the form of graphs and pictoral form is | descriptive statistics | inferential statistics | both (a) and (b) | none of the above | A | CO1 | L1, L2 |
| A | obj | 1 | The average growth rate of economy is measured using | arithmetic mean | harmonic mean | geometric mean | all the above | C | CO1 | L1, L2 |
| A | obj | 1 | The average age of employees in an organization is measured using | arithmetic mean | harmonic mean | geometric mean | all the above | A | CO1 | L1, L2 |
| A | obj | 1 | The range for the following data is $5,7,9,11,13,15$ | 10 | 20 | 11 | none of the above | A | CO1 | L1, L2, L3 |
| A | obj | 1 | The median for the following data is $7,9,11,13,15,17,19$ | 13 | 12 | 14 | none of the above | A | CO1 | L1, L2, L3 |
| A | obj | 1 | Median is best way of measuring central tendency when | data is skewed to left | data is skewed to right | both (a) and (b) | data is symmetric | C | CO1 | L1, L2 |
| A | obj | 1 | describing data requires the knowledge of | central tendency | dispersion of data | skeweness | all the above | D | CO1 | L1, L2 |
| A | obj | 1 | Kurtosis of a data gives us | the middle value | the range of the data | level of symmetry | peakedness of data | D | CO1 | L1, L2 |
| A | obj | 1 | Statistics can be classified as | Descriptive Statistics | Inferential Statistics | Both (a) and (b) | none of these | C | CO1 | L1, L2 |
| A | obj | 1 | Descriptive statistics is used for | for describing the phenomena | for drawing inferences | Both (a) and (b) | none of these | C | CO1 | L1, L2 |
| A | obj | 1 | When a time series data is plotted in diagramatic form it is usual to express it in | line graph | bar chart | histogram | pie chart | A | CO1 | L1, L2 |
| A | obj | 1 | The data to describe the different models of cars in a parking lot of a market is best shown using | line graph | bar chart | histogram | pie chart | B | CO1 | L1, L2 |
| A | obj | 1 | The data to describe the age of different employees in an organization is best shown using | line graph | bar chart | histogram | pie chart | C | CO1 | L1, L2 |
| A | obj | 1 | The proportion of people who suffer from different major diseases is shown using | line graph | bar chart | histogram | pie chart | D | CO1 | L1, L2 |
| A | obj | 1 | The data to show relationship between two variables such as thickness of steel and their tensile strength would be | bar chart | scatter plot | line graph | all the above | B | CO1 | L1, L2 |
| A | obj | 1 | The level of measurement for a data such as temperature of a city during a season will be | nominal | ordinal | interval | ratio | C | CO1 | L1, L2 |
| A | obj | 1 | The amount of expenses incurred by an individual on travel would be | nominal | ordinal | interval | ratio | D | CO1 | L1, L2 |
| A | obj | 1 | The preference you give to purchase of different brands of laptop would be | nominal | ordinal | interval | ratio | B | CO1 | L1, L2 |
| A | obj | 1 | The variable indicating the number of employees in an organization would be considered as | discrete | continuous | neither (a) or (b) | all the above | A | CO1 | L1, L2 |
| A | obj | 1 | The variable indicating the number of successful sales recorded by an employee would be considered as | discrete | continuous | neither (a) or (b) | all the above | A | CO1 | L1, L2 |
| A | obj | 1 | The variable indicating the amount of interest earned during a given year on his fixed deposits would be considered as | discrete | continuous | neither (a) or (b) | all the above | B | CO1 | L1, L2 |
| A | obj | 1 | Measures of dispersion include the following | range | standard deviation | quartile deviation | all the above | D | CO1 | L1, L2 |
| A | obj | 1 | Population mean for frequency distribution is calculated using | $\Sigma($ Xifi) / $/$ (fi) | $\Sigma(X \mathrm{Xifi}) /(\Sigma(\mathrm{fi})-1)$ | Both (a) and (b) | none of the above | A | CO1 | L1, L2 |
| A | obj | 1 | The Boom company has recently decided to raise the salaries of all employees by 10 percent. Which of the following is (are) expected to be affected by this raise? | mean and mode only | mean and median only | mode and median only | mean, median, and mode | D | CO1 | L1, L2 |
| A | obj | 1 | Variance is | square root of standard deviation | square of standard deviation | square of range | none of the above | B | CO1 | L1, L2 |
| A | obj | 1 | How do you define the Inter Quartile range? | Q3- Q1 | Max-Q1 | Max - Min | Max - Median | A | CO1 | L1, L2 |
| A | obj | 1 | In order to summarize qualitative data, a useful tool is a ___ . | Histogram | Frequency distribution | Stem-and-leaf diagram | All of the above | B | CO1 | L1, L2 |
| A | obj | 1 | If the mean of a variable is 20 and if all values of the variable is added by 10 then the mean for the new variable will be | 20 | 30 | 10 | none of the above | B | CO1 | L1, L2 |
| A | obj | 1 | If the mean of a variable is 20 and if all values are multiplied by 2 then the mean of the new variable will be | 40 | 10 | 20 | none of the above | A | CO1 | L1, L2, L3 |


| Part | sub/obj | Marks | Question | Answer Option 1 | Answer Option 2 | Answer Option 3 | Answer Option 4 | Correct Answer(A/B /C/D) | CO | Bloom's <br> Taxonom <br> y Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | obj | 1 | If the variance of a variable is 10 and if all the values are added by 10 then the variance of the new variable will be | 10 | 100 | 1000 | none of the above | A | CO1 | L1, L2, L3 |
| A | obj | 1 | If the variance of a variable is 10 and if all the values are multiplied by 3 then the variance of the new variable will be | 10 | 30 | 90 | none of the above | C | CO1 | L1, L2, L3 |
| A | obj | 1 | What is (are) the most widely used measure(s) of dispersion? | Range | Interquartile range | standard deviation | Covariance | C | CO1 | L1, L2 |
| A | obj | 1 | The measures of dispersion can never be: | Positive | Negative | 0 | 2 | B | CO1 | L1, L2 |
| A | obj | 1 | To compare the variation in Height and Weight of the Individuals. The measure used should be | standard deviation | variance | Absolute Measure | Relative Measure | D | CO1 | L1, L2 |
| A | obj | 1 | Which of the following is an example of relative measure of dispersion | standard deviation | variance | coefficient of variation | all the above | C | CO1 | L1, L2 |
| A | obj | 1 | Why is it necessary to square the differences from the mean when computing the population variance | so that extreme values will not effect the calculation | some of the differences will be negative and some positive | because $N$ could be very small | none of these | B | CO1 | L1, L2 |
| A | obj | 1 | When calculating the average rate of inflation it is best to use | harmomic mean | arithmetic mean | geometric mean | none of these | C | CO1 | L1, L2 |
| A | obj | 1 | What is the major assumption that we make when calculating mean from a grouped data | All values are discrete | Every value in a class is equal to the mid point | No value occurs more than once | Each class contains exactly the same number of values | B | CO1 | L1, L2 |

