

FBQ1: Statistics is a branch of mathematics that deals with analysis and interpretation of numerical data in terms of samples and populations.

Answer: Statistics

FBQ2: The term "statistics" can be useful as a tool in making effective decisions through a scientific process.

Answer: "scientific"

FBQ3: Data are pieces of information that represent the qualitative or quantitative attributes of a variable or set of variables.

Answer: Data

FBQ4: A variable is a property that can take on different values.

Answer: Variable

FBQ5: In graphing, the dependent variable is placed on the vertical (y-axis) while the independent variable is placed on the horizontal (x-axis).

Answer: Vertical

FBQ6: Chi-square and t-test are examples of inferential statistics.

Answer: Inferential statistics

FBQ7: A population consists of the totality of the observations of a particular group.

Answer: Population

FBQ8: The Venn-Euler diagram is an instructive illustration, which shows relationships between sets.

Answer: Set

FBQ9: Length, height, weight, temperature, volume and time as variables can be measured using continuous variables.

Answer: Continuous variables

FBQ10: The statement "x is an element or member of set A" or "x belongs to A" is written as  $x \in A$ .

Answer:  $x \in A$

FBQ11: Any set, which has only one element, is called a singleton.

Answer: Singleton

FBQ12: An infinite set is one whose elements are ..., as they are infinitely numerous.

Answer: Uncountable

FBQ13: Let  $A = \{a, b, c, d, e, f\}$  and  $B = \{c, d, e\}$  then we say B is contained in A.

Answer:  $A \supset B$

FBQ14: A histogram is a graph in which class boundaries or class interval is marked on the horizontal axis and the corresponding class frequency on the vertical

axis.

Answer: Histogram

FBQ15: Find the Median of: 104, 107, 110, 103, 105, 100

Answer: 104.5

FBQ17: Technique of Data Collection which may include the use of interview or administering questionnaires is known as \_\_\_\_\_.

Answer: Primary source

FBQ16: In a test administered to 10 students, the total score is 30. Find the deciles rank of a score of 26. 18, 28, 25, 26, 24, 30, 22, 20, 16, 27

Answer: 6.4

FBQ18: In a test administered to 10 students, the total score is 30. Find the value data that corresponds to the 8th Deciles. 18, 28, 25, 26, 24, 30, 22, 20, 16, 27

Answer: 27.5

FBQ19: The range of the set of numbers; 8, 2, 10, 12, 6, 7, 8, 16, 14, is

Answer:  $16 - 2 = 14$

FBQ20: \_\_\_\_\_ is a collection of statements specially arranged.

Answer: Argument

FBQ21: Statement (in logic context) is a sentence that is either \_\_\_\_\_ or \_\_\_\_\_.

Answer: True/False

FBQ22: Combination of two or more simple statements is called a \_\_\_\_\_.

Answer: Compound statement

FBQ23: the symbols  $\wedge$  placed between two simple statements such as statement  $p \wedge q$  read as \_\_\_\_\_ AND \_\_\_\_\_ is usually used to denote

Answer: Connective/Conjunction

FBQ24: The symbol used to denote disjunction in logic is \_\_\_\_\_.

Answer:  $\vee$

FBQ25:  $p \rightarrow q$  is an example of a \_\_\_\_\_ statement in logic

Answer: Bi conditional

FBQ26: A compound statement which is always TRUE irrespective of the truthvalues of the simple statement is called \_\_\_\_\_.

Answer: TAUTOLOGY

FBQ27: A CONTRADICTION is a compound statement which is always \_\_\_\_\_ irrespective of the truth values of the simple statements.

Answer: FALSE

FBQ28: \_\_\_\_\_ is used to make predictions that can be tested by observing the

outcome of an experiment.

Answer: A hypothesis

FBQ29: .. research deals with the determination, evaluation and explanation of the past events for the purpose of understanding the present and predicting the future.

Answer: The historical

FBQ30: Correlation studies can be classified as ..studies

Answer: Relationship

FBQ31: An alternative name for the cumulative frequency distribution is ..

Answer: Ogive

FBQ32: The symbol sigma, is used in mathematics to denote...

Answer: Summation

FBQ33: length, height, weight, temperature, volume and time as variables can be measured using

Answer: Continuous variables

FBQ34: Any numerical value describing a characteristic of a population is known as ..

Answer: Parameter

FBQ35: chi-square and t-test are examples of ..

Answer: Inferential statistics

FBQ36: The above formula is used to calculate...

Answer: Mean

FBQ37: The above formula is used for calculating the .. for a grouped data is ..

Answer: average mean

FBQ38: .. Is the distribution, which occurs most frequently in a distribution

Answer: mode

FBQ39: The above formula is used for calculating .. the of a group data

Answer: Quartile

FBQ40: .. are ways of grouping/partitioning distribution data to have relative partition of each value in the data.

Answer: Measures of partition

FBQ41: Given a set of raw data below 2, 3, 2, 1, 4, 4, 1, 1, 3, 2, 5, 3, 5, 1, 5, 1, 4, 2, 3, 0, 4, 1, 0, 3, 5, 2, 5, 0, 4, 1, 4, 0, 5, 2, 3, 0, 4, 4, 1, 2. what is the frequency of 3 and 4

Answer: 6 and 8

FBQ42: Given a set of raw data below 2, 3, 2, 1, 4, 4, 1, 1, 3, 2, 5, 3, 5, 1, 5, 1, 4, 2, 3, 0, 4, 1, 0, 3, 5, 2, 5, 0, 4, 1, 4, 0, 5, 2, 3, 0, 4, 4, 1, 2. what is the frequency of 5  
Answer: 6

FBQ43: In a frequency distribution table, the last cumulative frequency is equal to the  
Answer: Total frequency

FBQ44: Another name for measures of spread is called  
Answer: Measures of dispersion

FBQ45: The following table shows the distribution of the masses of 120 logs of wood, correct to the nearest kg. Find the median.  
Answer: 30 – 34

FBQ46: The above formula is used for calculating  
Answer: semi-interquartile

FBQ47: If the lower quartile of a distribution is equal to 35 and the upper quartile is given as 25. What is the semi interquartile range?  
Answer: 5

FBQ48: A measure of dispersion that covers the limitations of range and quartile deviation is  
Answer: Mean deviation

FBQ49: The above formula is used for calculating  
Answer: mean deviation

FBQ50: The above formula is used for calculating  
Answer: standard deviation

MCQ1: Technique of Data Collection which may include the use of interview or administering questionnaires is known as  
Answer: Primary source

MCQ2: Data or statistical materials collected by investigator from the printed materials published by another person or organisations are called  
Answer: Secondary data

MCQ3: A finite set is one whose members are  
Answer: Countable

MCQ4: A set that contains no element is called  
Answer: null

MCQ5: A universal set is the total  
Answer: Population

MCQ6: Find the intersection of the sets  $A=\{2,5,7,8,9\}$  and  $B = \{1,3,7,5\}$

Answer:  $\{5,7\}$

MCQ7: If we want to compare two distributions then  $\hat{\mu}$  is used

Answer: Polygon

MCQ8:  $\hat{\mu}$  entails the use of pictures to explain or illustrate statistical data.

Answer: Pictogram

MCQ9:  $\hat{\mu}$  is a chart in which each frequency is converted to degree and is presented on a circle

Answer: Bar chart

MCQ10: The symbol  $\Sigma$  is called  $\hat{\mu}$ , which is used mathematics to denote Summation.

Answer: Sigma

MCQ11: Find the mean of the following set of numbers: 10, 9, 11, 13, 12, 12, 11, 13, 10 and 16

Answer: 11.7

MCQ12: Find the Median of: 104, 107, 110, 103, 118, 100

Answer: 105.5

MCQ13: Find quartile  $Q_2$  for the data set 16, 25, 14, 18, 21, 23, 19, 18, 21, 49

Answer: 20

MCQ14: Find quartile  $Q_1$  for the data set 16, 25, 14, 18, 21, 23, 19, 18, 21, 49

Answer: 18

MCQ15: Find quartile  $Q_3$  for the data set 16, 25, 14, 18, 21, 23, 19, 18, 21, 49

Answer: 23

MCQ16:  $\hat{\mu}$  position the data array into ten equal groups

Answer: Deciles

MCQ17: Two fair coins are tossed together, find the probability that at least a tail shows up.

Answer:  $\frac{3}{4}$

MCQ18: If an unbiased die is thrown, find the probability that the number which show up is less than or equal to 4.

Answer:  $\frac{2}{3}$

MCQ19: Assuming there are 4 blue balls, 5 black balls and 6 red balls in a bag. If we pick a ball the first time, then replace the ball and again pick a ball the second time, then the type of ball we pick the first time does not, in anyway have any effect or influence on the second ball that was picked. Hence we say that the two outcomes are  $\hat{\mu}$

Answer: Independent.

MCQ20: A box contains 4 black and 6 white identical beads. If a girl picks two beads randomly one after the other with replacement. What is the probability that the first bead is black and the second bead is white

Answer:  $6/25$

MCQ21: Evaluate  $8!$

Answer: 40,320

MCQ22: Evaluate  $4P3 \div 4P2$

Answer: 2

MCQ23: Find the number of permutations of the letters of the word JAMES

Answer: 120

MCQ24:  $20C5 \div 20P5$

Answer:  $1/5!$

MCQ25: If 99.5% of the population of a village belongs to a political party XYZ. Find the probability that 2 out of 5000 villagers does not belong to the party XYZ.

Answer: 0.0023

MCQ26: Any systematic investigation to establish facts is calledâ€¦...

Answer: Research

MCQ27: ANOVA means

Answer: analyses of variance

MCQ28: If empirical data reaches significance under the appropriate statistical formula, the research â€¦... is supported

Answer: hypothesis

MCQ29: null hypothesis means no effect of the â€¦... was observed on the dependent variable(s).

Answer: independent variable(s)

MCQ30: â€¦... is an instrument of data collection

Answer: questionnaire

MCQ31: â€¦... is an attempt to synthesise and integrate, empirical data for maximum clarification and unification.

Answer: A theory

MCQ32: In â€¦... inquiry specific expectations of hypothesis are developed on the basis of general principles

Answer: deductive

MCQ33: In everyday affairs, decisions are made based on the available data or

information at hand.

Answer: data

MCQ34: the number of votes in an election is a \_\_\_\_\_ variable.

Answer: discrete

MCQ35: \_\_\_\_\_ means to predict, estimate or to project into the future.

Answer: forecasting

MCQ36: A statistical \_\_\_\_\_ is a statement or postulation or a theory about the relationship between a dependent and independent variables

Answer: hypothesis

MCQ37: Any set, which has only one element, is called a \_\_\_\_\_.

Answer: singleton

MCQ38: The Venn-Euler diagram is an instructive illustration, which shows relationships between \_\_\_\_\_

Answer: set

MCQ39: Two sets X and Y are said to be \_\_\_\_\_ if neither X nor Y has elements in common

Answer: disjoint

MCQ40: In set, the symbol  $\cap$  means

Answer: intersection

MCQ41: The following are statements except

Answer: How are you today?

MCQ42: This is 100 level class \_\_\_\_\_ and \_\_\_\_\_ Toyosi is a member of the class \_\_\_\_\_ is a \_\_\_\_\_ Statement

Answer: compound

MCQ43: Simple Bar Chart can contain only \_\_\_\_\_

Answer: one information

MCQ44: the outcomes of an experiment are \_\_\_\_\_ if each of the outcomes has an equal chance of occurring

Answer: equally likely

MCQ45: A tin box contains 9 black, 6 blue and 10 red marbles. If a marble is picked from the box at random what is the probability that it is a red marble?

Answer:  $\frac{2}{5}$

MCQ46: If two fair dice are rolled together what is the probability of obtaining a total of 4?

Answer:  $\frac{1}{12}$

MCQ47: If two fair dice are rolled together what is the probability of obtaining a number greater than 4 ?

Answer:  $\frac{11}{12}$

MCQ48: If two fair dice are rolled together what is the probability of obtaining a number divisible by 4 ?

Answer:  $\frac{1}{4}$

MCQ49: If two fair dice are rolled together what is the probability of obtaining a number which is a multiple of 5?

Answer:  $\frac{7}{36}$

MCQ50: A box contains 4 black and 6 white identical beads. If a girl picks two beads randomly one after the other with replacement. What is the probability that the first bead is black and the second bead is white

Answer:  $\frac{6}{25}$