Statistics and Analytics

1. Define statistics?

Statistics is a science of collecting, presenting, analyzing and interpreting the data as well as making decision based on such analysis.

2. Define data?

Date is a collection of information gathered by observation, measurements and research.

3. Name the two types of data?

The two types of data are:
*Primary data
*Secondary data

4. What is primary data?

It is a type of information that is obtained directly from the first source through observation, research andmeasurements.

5. Write the two types of primary data?

The two types of primary data are
*Qualitative data
*Quantitative data

6. What is qualitative data and give examples?

Qualitative data is a data which classify based on \ualitative characteristic.
Ex:* Is apple good for health
     *Is the playground in good condition to play a match.

7. What is quantitative data and give examples?
Quantitative data is a data which is classified based on quantitative characteristic.
Ex: * Number of players in a cricket match.
      *Number of students in a electrical branch.

8. Write the data collection tools?

The data collection tools are:
- Questionnaires
- Survey
- Interview

Focus group discussion.

9. What is questionnaire?
   - In this method a set of questions is mail to a responder.

10. Define Interview?
    The interview is a method of collecting data involves presentation oral verbal, stimulus and reply in terms of oral verbal responses.

11. Define survey?
    A survey is a process of data gathering information involving variety data collection including questionnaire.

12. Define focus group discussion?
    This research involves asking open ended questionto a group of individuals usually ranging from 6 to 10 people to provide feedback is called focus group discussion.

13. Define secondary data?
    Secondary data is a data which has been already collected and analyzed by someone other than the actual user.

14. Define frequency?
    Frequency refers to a number of times andobservation repeated.

15. Define descriptive statistics and given an example?
    Descriptive statistics is a way to organize, represent and describe a collection of data using tables, graphs andsummary measures.

16. Define range?
    It is the difference of highest value to lowest value ina data.
    Range = highest value- lowest value

17. Define class?

    Sub range is called class.

18. Define sample?

    A finite part of statistical population whose properties and characteristic are studied to gain the information about the whole population.

19. Define Relative frequency?

    Relative frequency is a ratio of frequency and totalfrequency.

    Relative frequency= frequency/ total frequency

    The value of relative frequency is always equal to 1.

20. Define continuous data?

Continuous data is a data that can be collected, it has it number of possible values that can be selected within a given specific range.

Ex:* Temperature range.

21. What are the types of quantitative data?
There are two types of quantitative data .They are:
*Continuous data
*Discrete data

22. What is discrete data?
Discrete data is a data that can take certain value.
23. Write any two examples of published data?

- Government publication
- Public records
- Business documents
- Historical and statistical documents

24. Write any two examples of continuous data?

- Height
- Weight
- Length
- Temperature

25. Write any examples of unpublished data?

- Diaries
- Letters
- Articles

26. Write any two examples for discrete data?
- Numbers of children in a family
- Number of students in a classroom.

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27. Explain data cleaning   .
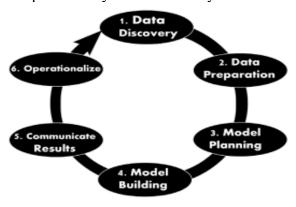
Data cleaning is the process of detecting and correcting (or removing) inaccurate <u>records</u> from a record set, <u>table</u>, or <u>database</u> and refers to identifying incomplete, incorrect, inaccurate or irrelevant parts of the data and then replacing, modifying, or deleting the   direct data.

28. Explain the steps to prepare a Google form
       Step 1: Create a Google form
       Step 2: Title the Google form
       Step 3: Type your questions
       Step 4: Click on send to share
       Step 5: Give response

29. Identify the different phases in cycle of data analysis
The different phases in cycle of data analysis:

30. Explain the interview of data collection.

Interview is the method of collecting data. It involves presentation of oral and verbal stimulus and relay also in terms of oral and verbal responses. They help to understand better and explain opinion and experiences interview question are open ended questions.

31. Justify your answer, how primary data is different from secondary data?

Primary data is the type of information that is obtained directly from first source through observation, measurement, research etc.
Example: Market research, Student thesis
Secondary data is the type of information which is being already collected and analyzed by someone other than the accurate user.
Example: Health records, Books.

32.   Justify your answer, how qualitative data is different from quantitative data?
Quantitative data is anything that can be counted or measured. It refers to numerical data.
For example: Number of Students in the class room.
Qualitative data cannot be measured or counted. It's descriptive, expressed in terms of language rather than numerical values.
For example: describing the sky as blue or labeling a particular ice cream flavor as vanilla.

33. Assume that you are collecting the feedback from the customer in restaurant, analyze topics on which questionnaire can be prepared to collect the data**.**

Questionnaire required to collect the data on customer feedback in restaurant are
- Parking facility, quality of food, cleanliness, menu, budget and serving timings.

34. Assume that you are collecting the information regarding survey on benefits on online teaching, analyze topics on which questionnaire can be prepared to collect the data.

Questionnaire required collecting the data on benefits on online teaching are
- Flexibility and convenience, Better time management, New technical skills, lower total costs, variety of programs etc.