what is purposive sample and quata sample?

Purposive Sampling:

Purposive sampling, also known as judgmental, selective, or subjective sampling, involves selecting participants based on specific criteria or characteristics relevant to the research question or objectives.

Researchers intentionally choose participants who are likely to provide rich and relevant information related to the study's focus.

This method is commonly used when researchers seek to capture a particular perspective or experience within a population.

Purposive sampling allows for targeted recruitment, ensuring that participants have the knowledge or experience necessary to contribute meaningfully to the study.

While this method can provide valuable insights, it may also introduce bias if the selection criteria are not carefully considered or if certain perspectives are overrepresented.

Quota Sampling:

Quota sampling involves dividing the population into subgroups based on specific characteristics (such as age, gender, ethnicity, etc.) and then selecting a predetermined number of participants from each subgroup.

Unlike random sampling, where participants are selected randomly from the entire population, quota sampling ensures that the final sample reflects the distribution of key characteristics present in the population.

Researchers set quotas for each subgroup based on their proportions in the population, aiming to achieve a representative sample.

Quota sampling is often used when it's challenging to obtain a random sample or when researchers want to ensure diversity within the sample.

While quota sampling can help ensure adequate representation, it may not fully eliminate bias, especially if the quotas are not set appropriately or if certain subgroups are underrepresented.

what is type of statistical test?

Parametric Tests:

Parametric tests assume that the data follow a specific probability distribution, usually the normal distribution. They are more powerful when data meet certain assumptions.

Examples include

t-test: Used to compare means between two groups.

Analysis of Variance (ANOVA): Used to compare means between more than two groups.

Pearson correlation: Measures the strength and direction of the linear relationship between two continuous variables.

Linear regression: Examines the relationship between one dependent variable and one or more independent variables.

Nonparametric Tests:

Nonparametric tests do not make assumptions about the underlying distribution of the data. They are often used when data do not meet the assumptions of parametric tests or when dealing with ordinal or categorical data.

Examples include:

Mann-Whitney U test: Nonparametric alternative to the independent samples t-test.

Kruskal-Wallis test: Nonparametric alternative to ANOVA.

Spearman correlation: Nonparametric alternative to Pearson correlation for assessing relationships between ordinal or non-normally distributed variables.

Chi-square test: Used to assess the association between categorical variables.

Chi-square test:

Example:

Categorical Data

Regression analysis:

Example: Linear, logistic

Correlation testing : example : person, spearman