# SHEET SOLUTION

#### 1. Inferential Statistics:

- a. Descriptive statistics
- b. Exploratory statistics
- c. Predictive statistics
  - d. Both a and b

#### 2. Types of Data:

- a. Quantitative
  - b. Discrete
  - c. Nominal
- d. All of the above

### 3. What does the p-value in hypothesis testing represent?

- a. Probability of the null hypothesis being true
- b. Probability of the alternative hypothesis being true
- c. Probability of obtaining the observed results or more extreme, assuming the null hypothesis is true
  - d. Probability of a Type II error

## 4.If you increase the confidence level from 90% to 95% in a confidence interval, what happens to the width of the interval?

- a. It stays the same
- b. It becomes narrower
  - c. It becomes wider
- d. It depends on the sample size

#### 5. What is the main goal of inferential statistics?

- a. Describe and summarise data
- b. Make predictions about a population based on a sample
  - c. Identify patterns in a dataset
  - d. Calculate measures of central tendency

#### 6. Which of the following is an example of inferential statistics?

- a. Calculating the mean of a sample
- b. Describing the frequency distribution of a dataset
- c. Making predictions about a population based on a sample
  - d. Organising data into a bar chart

## 7.If you categorise data as "low," "medium," and "high," what type of data are you dealing with?

- a. Nominal
- b. Ordinal
- c. Interval
- d. Ratio

#### 8. The null hypothesis is typically a statement of:

- a. No effect or no difference
  - b. An expected outcome
    - c. A significant result
- d. The mean of the population

#### 9.A wider confidence interval indicates:

- a. Higher precision
- b. Lower precision
- c. Higher confidence
- d. Lower confidence

## 10. Which of the following is an example of ordinal data?

a. Age

b. Temperature

c. Likert scale responses

d. Weight