



Name of Program- PhD

Course name- Research Methodology and Data Analysis Tools

Course Code- CC20P101

Max. Duration: 1.5 hrs

Max. Marks: 30

**SECTION - A**

1. Objective Type Questions (ALL QUESTIONS ARE COMPULSORY) (5X1 = 05)

- a) Which of the following scales is commonly used to measure attitudes by asking respondents to indicate the extent of agreement or disagreement with a statement?
- (i) Likert's Scale (ii) Semantic Differential Scale  
(iii) Thurstone Equal Appearing Interval Scale (iv) Both A and B
- b) Which measure of central tendency is most affected by extreme values?
- (i) Mean (ii) Median  
(iii) Mode (iv) Quartile
- c) What does the Slide Master feature in PowerPoint allow you to do?
- (i) Add animation to slides (ii) Customize the design and layout of all slides in the presentation  
(iii) Create speaker notes for each slide (iv) Print handouts of the presentation
- d) What is the purpose of the methodology section in a report?
- (i) To present key findings (ii) To showcase personal opinions  
(iii) To explain the research process (iv) To list recommendations
- e) What is a major disadvantage of using observation as a data collection method?
- (i) It is time-consuming and may be biased. (ii) It is quick and inexpensive to obtain  
(iii) It requires no interpretation or subjectivity. (iv) It cannot be used in natural settings.

## **SECTION – B**

### **2. Short Answer Type Questions (Attempt any THREE)**

**(3X5 =15)**

1. Differentiate between primary and secondary data sources.
2. Explain the importance of nominal and ordinal scale.
3. Discuss the importance of standard deviation, variance, and coefficient of variance in measuring data dispersion.
4. State and explain bivariate analysis.
5. Discuss the different types of reports.

## **SECTION – C**

### **3. Long Answer Type Questions (Attempt any ONE )**

**(1X10 =10)**

1. Describe the characteristics and applications of Poisson, geometric, binomial, and normal distributions in statistical analysis.
2. Define plagiarism and discuss its various forms. Why is it considered a serious ethical concern in research and academic writing?