24U3112

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Name : ....

Reg. No : ....

THIRD SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025

(FYUGP)

CC24UCOM3MN210 - DATA ANALYTICS WITH STATISTICAL SOFTWARE

(B.Com - Minor Course)

(2024 Admission - Regular)

Time: 2.0 Hours

Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)

Answer *all* questions. Each question carries 3 marks.

1. How do you enter and edit data manually in Data View (short steps & shortcuts)? [Level:4] [CO1]

2. What does the "Measure" column specify in Variable View? [Level:2] [CO1]

3. Explain the concept of a hypothesis in statistics. [Level:2] [CO2]

4. Give any three limitations of Statistics. [Level:4] [CO2]

5. Mention two factors that can be tested in Two-Way ANOVA. [Level:1] [CO3]

6. Write the formula for the One-Sample t-test and explain each term. [Level:2] [CO3]

7. Define factor analysis and explain its importance in business research. [Level:2] [CO4]

8. Explain the concept of mapping techniques in SPSS with examples. [Level:2] [CO4]

9. Explain one reason why Excel is preferred for preliminary data work before importing into SPSS. [Level:4] [CO1]

10. List three fields where SPSS is commonly used. [Level:4] [CO1]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

Answer *all* questions. Each question carries 6 marks.

11. Discuss the main features of SPSS. [Level:2] [CO1]

12. Explain the role of degrees of freedom in Chi-Square Test. [Level:2] [CO2]

13. Describe the main techniques used in Inferential Statistics. [Level:2] [CO2]

14. Describe the importance of checking normality before applying a parametric test. [Level:2] [CO3]

15. Write short notes on "Assumptions of ANOVA" and why they are important. [Level:3] [CO3]

16. A researcher compares the exam scores of two groups (n_1=10, mean$_1$=75, s_1=5; n_2=12, mean$_2$=80, s_2=4). Test at 5% level assuming equal variances. [Level:2] [CO3]

17. Define variable reduction technique and explain its importance in SPSS. [Level:3] [CO4]

18. Discuss challenges faced in predictive modelling. [Level:1] [CO4]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any *one* question. The question carries 10 marks.

19. What is the range of correlation values? Explain their interpretation. [Level:5] [CO2]

20. Explain the concept of a Paired Sample t-test. What are its assumptions, and how does it differ from an Independent Samples t-test? [Level:5] [CO3]

(1 × 10 = 10 Marks)

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