

DATE: 21.03.2023

TIME: 1.30 p.m. -4.30 p.m.

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**SECTION 2: STRUCTURED ESSAY QUESTIONS (60 MARKS)**

Choose 04 out of the 06 questions given below and answer using the provided answer sheets.

2.1

- a) Explain the difference between correlation and spurious correlation. (5 Marks)
- b) Explain the difference between linear correlation and non-linear correlation. (5 Marks)
- c) Explain the situations where we use the person correlation test and spearman's rank correlation test. (5 Marks)

2.2

- a) Write three assumptions of linear regression analysis. (6 marks)
- b) What is the difference between simple linear regression and multiple linear regression? (6 marks)
- c) What does the coefficient of determination (R) explain? (3 Marks)

2.3

- a) Explain the situation we use the ANOVA test? (5 Marks)
- b) Explain the difference between One-way ANOVA and two-way ANOVA. (5 Marks)
- c) Write the example for One-way ANOVA and two-way ANOVA. (5 Marks)

2.4

- a) Define the term validity. (3 marks)
- b) Write three types of validity measures. (6 marks)
- c) Explain the difference between internal validity and external validity. (6 marks)

2.5

- a) Define the purpose of the factor analysis. (3 Marks)
- b) Write three assumptions in factor analysis? (6 Marks)
- c) Write three different factoring methods. (6 Marks)

2.6

- a) What is the purpose of using open-ended questions in qualitative research?  
(3marks)
- b) What is the difference between purposive sampling and convenience sampling in qualitative research? (3marks)
- c) What are some common methods for analysing qualitative data? (3marks)
- d) What is saturation in qualitative research? (3marks)
- e) What is focus group in qualitative research? (3marks)

-----END OF QUESTION PAPER-----