

School of Liberal Arts

Economics
ETE - Jun 2023

Time : 3 Hours

Marks : 100

Sem II - K1UB201B - Advance Statistics with R Spss-2

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

1. Describe the characteristics of time series data. K2 CO1 (5)
2. Describe Chi- square test and its significance? K2 CO1 (5)
3. Explain the Time Series Analysis assumptions. K2 CO1 (5)
4. How can the means of two group data sets be compared using SPSS? Give an explanation of it using hypothetical data sets to support your claim. K2 CO2 (10)
5. "Chi-square can be used as a test of goodness of fit since it is a non-parametric test." Illustrate the statement. K3 CO3 (10)
6. Illustrate confidence intervals and explain, how they can be used to determine whether a parameter is statistically significant. K3 CO3 (10)
7. Show how to run regression analysis in SPSS and also describe the steps. K3 CO3 (10)

OR

A time series plot is a graph that displays data that has been acquired over time from any process. Show various time series plots. K3 CO3 (10)

8. How can you determine the relationship between monthly income and expenditure of residents in your town using SPSS? Mention the necessary steps to be followed for the analysis through SPSS software. K4 CO2 (15)
9. Distinguish between the Data view and the Variable view and show it using a diagram. K4 CO4 (15)
10. Examine four components of the Time series. K5 CO4 (15)

OR

Verify the given regression equation using hypothetical values for dependent variable and independent variables. K5 CO4 (15)

$$Y_t = \beta_0 + \beta_1 X1 + \beta_2 X2 + +u_t$$