Reg. No. | | | | | | | | |

G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.

UG DEGREE END SEMESTER EXAMINATIONS - APRIL 2025.

(For those admitted in June 2021 and later)

PROGRAMME AND BRANCH: B.COM.

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
VI	PART - III	CORE	U21CO616	STATISTICAL PACKAGE - SPSS

Date & Session: 29.04.2025/FN **Time : 3 hours** **Maximum: 75 Marks**

Course Outcome	Bloom's K-level	Q. No.	**SECTION – A (10 X 1 = 10 Marks)** **Answer ALL Questions.**
CO1	K1	1.	SPSS is a software package used for _____ analysis and data management. a) Financial b) Statistical c) Logical d) Operational
CO1	K2	2.	In SPSS, the _____ view is used to define the structure of the dataset, such as variable names and data types. a) Data b) Variable c) Output d) Chart
CO2	K1	3.	Data handling refers to the process of collecting, organizing, analyzing, and _____ data for meaningful insights. a) Storing b) Modifying c) Visualizing d) Sharing
CO2	K2	4.	Data handling involves using statistical techniques such as mean, median, and mode to analyze _____ data. a) Structured b) Unstructured c) Categorical d) Numerical
CO3	K1	5.	A _____ is a circular chart divided into sectors, representing proportions or percentages. a) Bar graph b) Pie chart c) Line graph d) Histogram
CO3	K2	6.	In a bar graph, the length of the bars is proportional to the _____ being represented. a) Categories b) Values c) Text d) Points
CO4	K1	7.	Descriptive statistics in SPSS are used to summarize and describe the main features of a _____. a) Graph b) Dataset c) Variable d) Chart
CO4	K2	8.	The _____ is a measure of variability that shows the difference between the highest and lowest values in a dataset. a) Variance b) Range c) Standard deviation d) Mean
CO5	K1	9.	The null hypothesis (H_0) states that there is _____ effect or relationship between variables. a) A significant b) No c) A Causal d) A positive
CO5	K2	10.	The Chi-square test is used in SPSS to test the association between _____ variables. a) Continuous b) Nominal or categorical c) Independent d) Dependent
Course Outcome	**Bloom's K-level**	**Q. No.**	**SECTION – B (5 X 5 = 25 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	11a.	Build a process to open an existing SPSS data file and how would you ensure the file is correctly loaded and ready for analysis? **(OR)**
CO1	K3	11b.	Develop a labelling system for dummy variables representing gender, where '1' is male and '0' is female.

CO2	K3	12a.	Write the SPSS command to split and select cases of the data by 'Education Level' into groups. **(OR)**
CO2	K3	12b.	Use the SPSS syntax to compute the total 'Income' score by summing the individual income sources.
CO3	K4	13a.	Compare the differences in frequency distribution between a simple bar chart and a multiple bar chart using the same categorical data in SPSS. **(OR)**
CO3	K4	13b.	Simplify the process of calculating percentages for categorical variables in SPSS and create a pie chart to display the results.
CO4	K4	14a.	Assume you are analysing the distribution of exam scores; how would you calculate the kurtosis in SPSS to assess the shape of the distribution? **(OR)**
CO4	K4	14b.	Focus on determining the linear relationship between customer satisfaction and product quality ratings; how would you use Karl Pearson's correlation in SPSS for this analysis?
CO5	K5	15a.	Justify why an independent t-test is the appropriate statistical method to compare the average sales performance between two regions in SPSS. **(OR)**
CO5	K5	15b.	Interpret the results of a paired t-test in SPSS comparing the average weight of participants before and after a fitness program.

Course Outcome	**Bloom's K-level**	**Q. No.**	**SECTION – C (5 X 8 = 40 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	16a.	Identify the recoding method used for converting continuous variables into categories. **(OR)**
CO1	K3	16b.	Construct a new variable in SPSS combining the 'Education Level' and 'Employment Status' variables to create a socio-professional index.
CO2	K4	17a.	Analyse the alignment of columns in your frequency table and adjust the column widths for better visibility of data in SPSS. **(OR)**
CO2	K4	17b.	Examine the font style and size used in your output tables and change them to ensure consistency across all tables in SPSS.
CO3	K4	18a.	Connect the use of a frequency table with the creation of a histogram in SPSS to visualize the distribution of test scores. **(OR)**
CO3	K4	18b.	Illustrate the relationship between two continuous variables by creating a scatter diagram in SPSS.
CO4	K5	19a.	Assess the correlation between the rankings of employees' performance and their promotion eligibility by calculating Spearman's Rank Correlation in SPSS. **(OR)**
CO4	K5	19b.	Evaluate the relationship between multiple independent variables and the dependent variable using multiple regression analysis in SPSS.
CO5	K5	20a.	Prove that there is a significant difference in income levels between urban and rural residents by conducting a Mann-Whitney U test in SPSS. **(OR)**
CO5	K5	20b.	Prepare to compare the effectiveness of three different teaching methods on student performance by conducting a Kruskal-Wallis test in SPSS.