

# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

Autonomous Siddhartha Nagar, Vijayawada–520010 Re-accredited at 'A+' by the NAAC

## 23STMAP122: Descriptive Statistical Data Analysis - SPSS

Offered to: B.Sc. Honours (Statistics)

Course Type: Major 4 (P)

Semester: II

Year of Introduction: 2023-24

Credits: 1

**30Hrs** 

Course Prerequisites: Student required basic knowledge in Mathematics.

**Course Description:**This course gives Practical and working knowledge of Excel to students with the aim of getting to use data analysis

### **Course Objectives:**

1) To analyze data pertaining to discrete and continuous variables and to interpret the results.

2) To evaluate the properties of mathematical expectation.

Learning Outcomes: At the end of the course, the student will able to:

- 1) To acquire the knowledge of the univariate and bivariate data analysis
- 2) To learn the measure of randomness mathematically by using expectations.
- 3) To get the familiarity about the generating functions, law of large numbers and central limit theorem, further to apply in research and allied fiends.

Course Outcomes:						
Course Outcome	Upon successful completion of this course, students should have the knowledge and skills to:	Program Outcomes Mapping				
CO 1	Understand the SPSS packages and describing a variety of statistical variables in SPSS	PO1				
CO 2	integrate and access the data base from different source of file format.	PO2				
CO3	Construct various charts and diagrams in SPSS	PO2				
CO 4	Construct the frequency tables in SPSS	PO2				
CO 5	Recommend the best statistical tool for basic statistical analysis.	PO2				

CO-PO MATRIX										
	CO-PO	PO1	PO2	PO3	PO4	PO5	PO6	P07		
	CO1	3								
23STMAP122	CO2		3							
	CO3		2							
	CO4		2							
	CO5		3							

#### List of practical's

- 1) Data entry, Import and Export the data sets from various formats to SPSS
- 2) Construction of frequency table for univariate categorical data using SPSS
- 3) a) Construction of pie chart for nominal data using SPSS
  - b) Construction of pie chart for ordinal data using SPSS
- 4) a) Construction of bar chart for nominal data using SPSS
  - b) Construction of bar chart for ordinal data using SPSS
- 5) Create grouped frequency table from given raw data (non categorical) using SPSS
- 6) Computation of descriptive statistics for continuous data using SPSS
- 7) Construction of histogram for continuous data using SPSS
- 8) Construction of Box plots using SPSS
- 9) Construction of Crosstabs using SPSS

#### **Question Paper Pattern for Core Lab Courses**

#### (A) Semester End Lab Examination

**(B)** 

23ST	MAP122: Descriptive Stati	stical Data Analysis - SPSS		
Max.Marks: 35		<b>Max.Time: 3Hours</b>	Pass. Min:	14
I.	Answer the following.	Max. M	arks: 30	
	Q1			
	Q2			
	<b>0</b> 3			
	<b>Õ</b> 4			
	<b>0</b> 5			
II	Viva		3 Marks	
III	Record		2 Marks	
<b>CONTINUOUS ASSESMENT (Internal)</b>			15 MARKS	
TOTAL : (A)+(B) =			50MARK	S
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