



## **SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)**

(Established under section 3 of the UGC Act 1956)

**Re - accredited by NAAC with 'A' Grade**

**Founder: Prof. Dr. S. B. Mujumdar, M.Sc., Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)**

(Established under section 3 of the UGC Act 1956, by notification No.F.9-12/2001-U3  
Government of India)

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### **Sub Committee for Curriculum Development**

**Course Name:** Basic Business Statistics for Data Analysis

**Course Code:** T3071

**(UG/PG):** PG

**Number of Credits:** 2

**Level:** 4

**Learning Objective(s):** To introduce basic concepts of statistics and how to use it for data analysis

#### **Pedagogy:**

Lecture Case Study  
Assignments  
Spread sheets/ R/SPSS  
Concept map

#### **Pre-learning:**

Knowledge of simultaneous equations, quadratic equations, equation of straight line and coordinate geometry.

**Course Outline:**

Sr.No.	Topic	Hours
1	Introduction Concept of Data, Use of statistics in different business disciplines, Types of Data – Attribute and Quantitative, Cross-sectional and longitudinal, Scales of Measurement Pedagogy- Case Study	3
2	Data Summarization Attribute Data – Cross tabulation, Relative and Percent Frequency, Bar and Pie Charts Variables – Frequency Distributions, Cumulative Frequencies, Pivot Table, Dot Plots, Histograms Stem and Leaf display, Simpson's paradox, Scatter Diagram, line graph interpretation from each diagram Pedagogy- class room sessions with Case Study, spread sheets/ R/SPSS	6
3	Descriptive Statistics Averages – Mean, Mode, Median, Geometric mean, harmonic mean and Quartiles for ungrouped data & grouped Data, Weighted means Use of appropriate average per data type Pedagogy- class room sessions with Case Study, spread sheets/ R/SPSS	7.5
4	Descriptive Statistics Measures of Dispersion – Range, Variance, Standard Deviation, Coefficient of Variation, geometrical interpretation of Standard Deviation Measures of Shape – Z-Score, skewness, kurtosis, Chebyshev's Theorem, Detecting Outliers, Boxplots Pedagogy- class room sessions with Case Study, spread sheets/ R/SPSS	7.5
5	Descriptive Statistics Measures of Association – Covariances, Correlation and its interpretation, Simple regression Pedagogy- class room sessions with Case Study, spread sheets/ R/SPSS	6
	<b>Total</b>	<b>30</b>

**Books Recommended:**

SrNo	Title of Book	Authors	Publication
1	Statistical Techniques in Business and Economics	Lind, Marchal, Wath en	Tata McGraw-Hill Companies
2	Statistical for Business and Economics	Anderson, Sweeny, Williams	South-Western CENGAGE Learning
3	Business Statistics :For Contemporary Decision Making	Ken Black	Wiley
4	Complete Business Statistics	Amir Aczel, Jayavel Sounderpandian	Mc Graw Hill

**Suggested Evaluation Methods:**

Written Exam  
Online exam  
Assignments

**List of Assignments:**

- Preparing a small questionnaire on a topic
- using excel draw the chart, bar chart, & Pie chart
- Collecting data from 5 individuals on a topic and analyzing the data and drawing inferences using statistics.
- solving 5 problems on each topic

Case Study  
Mini Project  
Presentation

**Parallel/Similar courses the existing curriculum:**

S.No.	Name of the course	Institute where it was offered

Name of Member	Mrs. Shilpa Mujumdar				
Designation	Asst. Professor				
Org. / Inst.	SICSR				
Signature					

Name of the Expert:

Signature:

Date:

