Business Statistics

Computer Code-1003

Module 1.3

Evaluation Pattern: Internal Evaluation   25 Marks

External Evaluation   75 Marks

Unit	Topic	Weight age %	No. of Periods
	Objective: To familiarize students with basic statistical business tools.		
1	**DESCRIPTIVE STATISTICS FOR UNIVARIATE DATE** **Introduction to Statistics:** Preparation of frequency distributions including graphic presentation. **Measures of Central Tendency:** Mathematical Averages : Arithmetic means, Geometric mean, Properties & Applications. **Positional Averages:** Mode & Median & other partition values - Quartiles, Deciles & Percentiles (including graphic determination). **Measures of Variation:** Absolute, Measures, Range, Quartile Deviation, Mean Deviation, Standard Deviation, Variance.	25	15
2	**FORECASTING TECHINIQUES** **Covariance & Correlation:** Meaning, Correlation using scatter diagram. Karl Pearson's co-efficient of correlation:	25	15

	Calculation & Properties, Rank Correlation. **Regression Analysis:** Linear regression defined. Regression defined. Regression equations & estimation. **Components of Time Series:** Additive & Multiplicative models **Trend Analysis:** Finding Trend by moving average methods, Fitting of Linear quadratic trend principle of least squares.		
3	**INDEX NUMBERS** **Meaning & Uses of Index Numbers :** Simple & weighted Index. No., Construction of Index No., Fixed & Chain base; Paashe's Laspeyre's Kelly's & Fishers Index No. simple & tests of adequacy of Index No. Construction of consumer price indices. Deflating, Splicing, Quantity & Value Index Nos. Shifting of base year, conversion of chain based to fixed base & vice-a- versa, Cost of living Index Nos. inflation concept of Industrial Production Indices.	**25**	**15**
4	**PROBABILITY, PROBABILTY DISTRIBUTION & ITS APPLICATIONS (11 Lectures)** **Probability :** Probability as a concept, Addition & Multiplication Laws of probability (statement & concept only), Conditional Probability, Bayer's Theorem **Random Variables :** Random variable, Expectation & variance, Probability Distributions; Binomial & Normal Distribution	**25**	**15**
	Total	**100**	**60**

Suggested Reading :

1. S. P. Gupta, Statistical Methods, Sultan Chand & Sons, 2011

2. Mathematics & Statistics, Ajay Goel & Alka Goel, Taxman Allied Services (P) Ltd.

3. Fundamentals of Mathematics & Statistics, S P Gupta & V K Kapoor, S. CHand.

4. Statistical Methods, S P Gupta

5. Business Statistics, Deshpande & Vaidya

6. Business Statistics, kumbhajkar