

Vocational Skill Development Course		
Business Statistics		
Course Title		
Course Outcomes	On completion of the course the student will be able to:	
CO1:	Understand the basics of Statistics, data and various graphical representations of data.	
CO2:	Learn about measures of central tendency, dispersion, skewness & kurtosis of the data.	
CO3:	Understand the basics of Probability theory and some Probability Distributions.	
CO4:	Learn about the relationship between variables by correlation and regression methods.	
CO5:	Understand the basic concepts of Index numbers and Time series Analysis.	
Credits:03	Total No. of Lectures-Tutorials-Practical (in hours per week)	L-T-P (3-0-0)
Marks	Internal Marks: 25 External Marks:75	100
Unit	Topic	No. of lectures
I	<b>Introduction:</b> Meaning, nature, limitation, statistical investigation, types and collection of data, editing of collected data, classification and tabulation of data, diagrammatic and graphic presentation of data.	08
II	<b>Measures of central tendency, measures of dispersion, skewness &amp; kurtosis:</b> Arithmetic, geometric & Harmonic mean, mode, median, quartile & their physical Significance, range, quartile deviation, mean deviation, standard deviation, measures of skewness and kurtosis.	08
III	<b>Probability theory and distributions:</b> Basics of probability theory, addition and multiplication theorems, Binomial, Poison and Normal distributions.	08
IV	<b>Correlation &amp; regression:</b> Scatter diagram, Karl Pearson's coefficient of correlation Bank & correlation, coefficient, Determination of simple linear regression, method of least square lines of regression & their Application.	12

V	<b>Index numbers and Time series Analysis:</b> Meaning & preparation of simple & weighted Index numbers. Cost of living index Laspyere's, Paasche's & Index Number. Basics of time series and various trend methods.	08
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**Reference books/Text books:**

1. Business Statistics, a First Course, David, M. Levine, Pearson Education; Seventh edition, 2017.
2. Statistics for Business-Decision Making and Analysis, Rover Stine, Dean Foster, Pearson, 2020
3. Fundamentals of Statistics-Vol II, A. M. Gun, M. K. Gupta, Dasgupta, World Press, 2016.
4. Fundamentals of business statistics, J. K. Thakral, Taxman's 4<sup>th</sup> Edition.
5. Statistical Methods, S. P. Gupta, Sultan Chand and Sons.

**Suggested Continuous Evaluation Methods:**

Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests.

Internal assessment	Marks
Class interaction	05
Quiz/assignment	05
Seminar/presentation	05
Unit test/ class test	10
Total	25