Module – III: 8 hours

MS OFFICE: MS-EXCEL, OPEN OFFICE: CALC & MATH,MS OFFICE: MS-POWER POINT, OPEN OFFICE: IMPRESS

Module – IV: 8 hours

MS OFFICE: MS-ACCESS, OPEN OFFICE: BASE

Reference Books:

1. Fundamentals of computers - V.Rajaraman - Prentice- Hall of India

2. Microsoft Office 2007 Bible - John Walkenbach,Herb Tyson,Faithe Wempen,cary N.Prague,Michael R.groh,Peter G.Aitken, and Lisa a.Bucki -Wiley India pvt.ltd.

3. The complete reference Linux - Richard petersen - Tata McGraw - Hill Edition

4. A Conceptual Guide to OpenOffice.org 3 - R. Gabriel Gurley- CreateSpace Independent Publishing Platform, 2008.**Course title:Data analysis**

Course code:VAC050.

Credit:02

Contact hours:30.

Course title	Course code	Total credits	Contact hours	Assessment weightage(%)				
				Written	Practical/ Demonstration	Laboratory/ Presentation	Field work/ Project work	Assignment
Data analysis	VAC050	02	30	40	20	20	10	10

Data analysis for extracting information is mandatory for all aspects of investigation .Knowing the fundamentals of data using statistical tools enables learner to analyse data of their respective fields. **Learning objective** is to let students use of statistical tools thereby enabling students to analyse data related to their field of studies/enquiry for drawing conclusion as regard to their investigation/query.

Learning outcome: After learning the course contents ,students shall be able to use statistical techniques for analyzing data set to draw inferences about population based on sample studies.

Module-I:6 hours.

Data and Variables: Types of data and variables as foundation for analysis, methods of data collection, frequency distribution tables ,data presentation using graphs and diagrams.

Module-II:8 hours.

Data description: Measures of Central Tendencies and Variability, Skewness and Kurtosis.

Module-III:8 hours.

Analysis of uncertain data: Probability concept , Fundamental laws of probability and their applications

Module-IV:8 hours.

Data analysis and tests: Simple correlation and regression analysis, One way analysis of variance, t -test and f -test.

References:

1.Statistics Principles and Methods by Richard Johnson and Gauri Bhattacharya,John Willey & Sons,New York,1985

2.The essence of STATISTICS FOR BUSINESS 2nd Edition by Michael C.Fleming Joseph G.Nellis ,Prentice Hall of India pvt.ltd.New Delhi1995

3.Statistical Methods for Environmental & Agricultural Sciences 2nd Edition by A.Reza Hosmand,CRC Press,New York1998

4.Statistics :A Foundation For Analysis By Ann Hughes and Dennis Grawoig,Addition Willey publishing Company,London 1971

Course Title:Basics of Big data

Course code:VAC051.

Credit:02

Contact hours:30.

Course title	Course code	Total credits	Contact hours	Assessment weightage(%)				
				Written	Practical/ Demonstration	Laboratory/ Presentation	Field work/ Project work	Assignment
Basics of Big data	VAC051	02	30	40	10	20	10	20

It is important to have a basic overview of big data. Big data refers to collection of complicated data in volumes that includes management capabilities, media analytics and real time data. Today , big data technologies drive the world. To master big data technology, students must have a fair knowledge of all its basics.