MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act,1956

COURSE CONTENT

STATISTICAL DATA ANALYSIS LAB								
II SEMESTER								
Course Code	**Category**	**Hours/Week**			**Credits**	**Maximum Marks**		
		L	**T**	**P**	**C**	**CIE**	**SEE**	**Total**
24MB0015	**LAB**	0	0	2	2	40	60	100
Contact Classes: Nil	**Tutorial Classes:** Nil	**Practical Classes:** 30				**Total Classes:** 30		
Prerequisite: Basic knowledge of computers, MS Office applications, and fundamental statistics concepts.								

COURSE OVERVIEW:

This course provides practical training in data analysis and statistical techniques using computer applications. The lab focuses on developing skills in MS Word, MS PowerPoint, and MS Excel for data management, statistical analysis, and professional report preparation. Students will learn to organize, analyze, and present data effectively using spreadsheet tools and statistical methods.

COURSE OBJECTIVES:

- To develop skills in preparing professional documents and presentations using MS Word and MS PowerPoint.
- To enable students to organize and analyze data using MS Excel through worksheets, formulas, functions, charts, and macros.
- To apply statistical techniques such as T-test, Z-test, and ANOVA for analyzing sample data.
- To perform correlation and regression analysis using Excel Data Analysis tools for interpreting relationships between variables.
- To develop the ability to prepare structured statistical reports based on data analysis following standard formats.

COURSE OUTCOMES: After Completion of the course, students should be able to

1. Master key features of MS Word & MS PowerPoint for creating, formatting, designing documents and presentations
2. Outline the primary features of MS Excel, covering worksheet setup, cell formatting, formula - function creation, macro development, data management, and chart creation
3. Apply statistical tests—T-test, Z-test and ANOVA—for hypothesis testing on sample means
4. Analyze variable relationships using correlation and regression techniques with the Data Analysis tool

5. Evaluate data and statistical findings for generating structured reports aligned with prescribed formats

Module I: MS-Word – Creation of Document – Format Document – Text editing and saving – Organizing information with tables and outlines – Mail merge – Publishing documents on Web.

MS Power Point- Creation of slides-Use of templates and slide designs for creating power point slides- use of drawings and graphics. Developing a Professional presentation on Business Plans, Institutions, Products, and People etc.

Module II: MS Excel-Creating and editing worksheets-Cell formatting-Creating and using formulas and functions-Use of Macros –Sorting and querying data-Working with graphs and charts.

Module III: Sample test for means-T-test, Z-test, ANOVA, one-way, two-ways.

Module IV: Correlation & Regression using Data Analysis tool.

Module V: Report writing according to the format suggested.

TEXT BOOKS:

1. Gross Debra, "Succeeding in Business with Microsoft Excel - 2013: A Problem Solving Approach", Cengage Learning, 1st edition, 2014.
2. Paul Mcfedries, "Excel 2013 Formulas and Functions", Pearson Education, 1st edition, 2013.
3. Dodge Mark, Stinson Craig, "Microsoft Excel 2013 Inside Out", Prentice Hall of India, 1st edition, 2013.

REFERENCE BOOKS:

1. Giridhar Joshi, "Management Information Systems", Oxford University Press, Revised 1st edition, 2013.
2. Lisa Miller, "MIS Cases: Decision Making with Application Software", Pearson Education, Revised 1st edition, 2011.
3. Guy Hart Davis, “How to do everything with Microsoft Office Excel”, Tata McGraw Hill, Revised 1st edition, 2010.

ELECTRONIC RESOURCES:

1. http://www.abebooks.com/servlet/SearchResults?isbn.pdf.
2. http://www.amazon.in/Succeeding-Business-Microsoft-Excel-2013
3. http://ctan.org/pkg/bibtopic

MATERIALS ONLINE:

1. Open-ended experiments
2. Lab Manuals