IT FOR MANAGERS LABORATORY

I Semester: MBA

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	**T**	**P**	**C**	**CIA**	**SEE**	**Total**
CMBB13	**Core**	0	0	2	2	30	70	100
Contact Classes:45	**Tutorial Classes: Nil**	**Practical Classes: Nil**				**Total Classes: 45**		

COURSE OBJECTIVES:
The course should enable the students to:
I. Understand the concept of information technology and its role in an organization.
II. Apply data analysis in MS Excel.
III. Identify hands on experience in working with MS Excel.
IV. Recognize different types of formulas and functions in MS Excel.
V. Examine LaTeX documentation for AMS-LaTeX and Short Math Guide for LaTeX.

COURSE OUTCOMES (COs):
CO 1: Enrich the knowledge on information technology in an organization.
CO 2: Understand the basic operations and features of MS Excel.
CO 3: Demonstrate the migration from the basic concepts to working with functions.
CO 4: Explore data analysis techniques and apply in MS Excel.
CO 5: Enrich the basic introduction to LaTeX for acquiring various templates to compose mathematical documents, presentation, mini projects and reports.

COURSE LEARNING OUTCOMES (CLOs):

1. Understand the basic concepts of Information Technology and Systems.
2. Analyze the role of Information Systems in an organization.
3. Identify the importance of MS Excel as a spreadsheet based DSS, features and uses of MS Excel.
4. Apply the basic concepts of MS Excel –worksheet management, cell referencing and range formulas.
5. Elaborate the feature of Auto sum, Sorting, Filters, Conditional formatting, charts.
6. Apply various function like date and time function, math and statistical functions, financial function and database functions.
7. Analyze logical and information functions.
8. Construct and evaluate Regression models in MS Excel like linear, exponential and power curve.
9. Analyze the importance of multiple regression and analysis of variance One - way Anova, Two - way Anova.
10. Understand the concept of creating pivot tables and pivot charts.
11. Understand the basic introduction to LaTeX for documentation.
12. Analyze the Short Math Guide for LaTeX, Mathematical Expression, Mini Project.

LISTS OF EXPERIMENTS

WEEK-1	INTRODUCTION OF INFORMATION TECHNOLOGY
Introduction to Information Technology and Information Systems	

WEEK-2	ROLE OF INFORMATION SYSTEMS
Role of Information Systems in an organization and Decision Support Systems (DSS)	

WEEK-3	INTRODUCTION TO MS EXCEL
MS Excel as Spreadsheet based DSS - Features of MS Excel, Uses of MS Excel.	

WEEK-4	BASICS OF MS EXCEL
Spreadsheet Orientation: Accessing, overview of toolbars, saving spreadsheet files, Using help and resources. Creating a Scheduler:- Gridlines, Format Cells, Summation, auto fill, Formatting Text	

WEEK-5	VARIOUS FORMATTING STYLES IN MS EXCEL
Calculating GPA - Features to be covered:- Cell Referencing, Formulae in spreadsheet – average, std. deviation, Charts, Renaming and Inserting worksheets, Hyper linking, Count function, Sorting, Conditional formatting.	

WEEK-6	WORKING WITH TEXT AND LOOKUP FUNCTIONS
Create a spreadsheet by using the following functions : Text Functions, Lookup Functions.	

WEEK-7	WORKING WITH FUNCTIONS
Create a spreadsheet by using the following functions : Date and Time Functions, Math and Statistical Functions, Database Functions.	

WEEK-8	DATA ANALYSIS WITH MS EXCEL
Create a spread sheet document by using data analysis concept with what - if Analysis - Data Tables, Scenario Manager, Goal Seek.	

WEEK-9	CREATION OF VARIOUS CHARTS IN MSEXCEL
Apply data analysis concept for creating Pivot Tables and Pivot Charts.	

WEEK-10	LaTeX FORMATTING
Introduction of LaTex and LateX document formatting: Create a LaTeX document with following formatting: All margins with 1.5, headings with bold, text with normal, chapter name with blue color, line space with 1.5.	

WEEK-11	VARIOUS FORMATTING STYLES IN LaTeX
Using LaTeX to create project certificate. Features to be covered:- Formatting Fonts in word, Drop Cap in word, Applying Text effects, Using Character Spacing, Borders and Colors, Inserting Header and Footer, Using Date and Time option in both LaTeX.	

WEEK-12	GRAPHICS AND TABLES IN LaTeX
Create a LaTeX documents with images and image caption at centre alignment, table with thick border and table caption with centre alignment, row height, content with cell centre alignment.	

Text Books:

1. Gross Debra, "Succeeding in Business with Microsoft Excel - 2013: A Problem Solving Approach", Cengage Learning, 1st Edition, 2014.

REFERENCE BOOKS:

1. Paul Mcfedries, "Excel 2013 Formulas and Functions", Pearson Education, , 1st Edition,2013.

2. Dodge Mark, Stinson Craig, "Microsoft Excel 2013 Inside Out", Prentice Hall of India, 1st Edition, 2013.
3. Guy Hart Davis, How to do everything with Microsoft Office Excel, Tata McGraw Hill, Revised 1st Edition,2010.
4. Lisa Miller, "MIS Cases: Decision Making with Application Software", Pearson Education, Revised 1st Edition,2011.
5. Giridhar Joshi, "Management Information Systems", Oxford University Press, Revised 1st Edition, 2013.

WEB REFERENCES:

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

E-Text Books:

1. http://www. http://www.chegg.com/textbooks/succeeding-in-business
2. http://www.cengage.com.au/product/title/succeeding-in.

Course Home Page:

SOFTWARE AND HARDWARE REQUIREMENTS FOR A BATCH OF 25 STUDENTS:
HARDWARE: Desktop Computer Systems: 24 nos.
SOFTWARE: LaTeX