



“Dissemination of Education for Knowledge, Science and Culture”
-Shikshanmaharshi Dr. Bapuji Salunkhe



Shri Swami Vivekanand Shikshan Sanstha Kolhapur’s

RAJE RAMRAO MAHAVIDYALAYA, JATH

Dist- Sangli (Maharashtra) 416 404

UGC Recognition under 2F & 12 (B) UGC Act 1956

(Affiliated to Shivaji University, Kolhapur)

NAAC Reaccredited: “B” (Third Cycle)

DEPARTMENT OF STATISTICS

Academic Year 2021-22

Career Oriented Programme

In

“MS-EXCEL: Basic to Advance”

Shri Swami Vivekanand Shikshan Sanstha Kolhapur's

RAJE RAMRAO MAHAVIDYALAYA, JATH

DEPARTMENT OF STATISTICS

Career Oriented Programme

In

“MS-EXCEL: Basic to Advance”

Preamble:

Microsoft Excel is an electronic spreadsheet. You can use it to organize your data into rows and columns. You can also use it to perform mathematical calculations quickly. This course teaches Microsoft Excel basics as well as advanced as a prelude to the use of Statistical Analysis System (SAS) software in carrying out more complex statistical analysis. The role of this course is to teach participants the various formulas used in Excel. Although knowledge of how to navigate in a Windows environment is helpful, this manual is created for the computer novice.

Advanced Excel plays a very important role in structuring & presenting data so that it looks impressive. Once one has a good understanding of Excel features like tables, cell styles, formatting options, then it is necessary to make awesome Excel workbooks. This course is tailored for those who perform intensive data analysis and for use of various Advanced Excel Functions and Features.

Objectives:

As a result of taking the “MS-EXCEL: Basic to Advance” programme, participants will be able to:

- Identify the different components of the Excel worksheet.
- Enter text and formulas in to an Excel worksheet.
- Construct formulas to manipulate numeric data in an Excel Worksheet.
- Set up the chart function of Excel to represent numeric data in multiple formats.
- Access and manipulate data using the database functions of MS-Excel.

- Create simple & complex macros in MS-Excel.
- Learn MS-Excel Features and how activities can be performed effectively and efficiently using MS-Excel.
- Use of Advanced Excel formulas and features in intensive data analyses.
- Explore the magic of analyzing data using Advanced Excel.
- Statistical data analysis using MS-EXCEL.

Learning Outcomes:

At the end of the programme, participants are expected to know how to use Microsoft Excel to:

- Enter text and numbers in a spreadsheet
- Perform basic mathematical operations in a spreadsheet
- Formatting data
- Create Excel functions & apply formulas
- Print results
- Create Macros
- Familiarize oneself with Excel's Basic features
- Gain skills on data visualization using MS-Excel
- Acquire skills for data analysis using MS-Excel
- Apply advanced Excel formulas

Nature of Programme:

Duration of Course	: 30 Hours
Eligibility of Course	: All UG & PG Students of any faculty
Admission	: First come first served basis
Maximum no. of student	: 30

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DEPARTMENT OF STATISTICS

SYLLABUS

For

Career Oriented Programme

In

“MS-EXCEL: Basic to Advance”

Theory (Total period: 18hrs)

CONTENTS:

UNIT-I

Basics of MS-Excel:

Features of MS Excel, Worksheets and Workbooks: Labeling and Naming Worksheets and Workbooks, Adding, Deleting and Saving Worksheets and Workbooks, Reposition Worksheets, Inserting, Deleting, and Renaming Worksheets, Copy Worksheets, Preview & Printing a Workbook, Formatting a Worksheet, Adding Elements to a Workbook, Protecting Worksheet and Workbook, Password Protecting Excel Files.

Formatting Worksheets:

Labelling columns & rows, Formatting- Cell, row, column & Sheet, Category-Alignment, Font, Border & Shading, Hiding/ Locking Cells, Anchoring objects, Formatting layout for Graphics, Clipart etc., Worksheet Row & Column Headers, Sheet Name, Row height & Column width, Visibility - Row, Column, Sheet, Security, Sheet Formatting & style, Sheet background, Colour etc, Borders & Shading – Shortcut keys.

UNIT-II

Entering & Deleting Data:

Entering data, Cut, Copy, Paste, Paste Special, Undo, Redo, Filling Continuous rows, columns, Auto filling, Highlighting values, Find, Search & replace, Inserting Data, Insert Cells & sheets, Selecting Columns and Rows, Adjusting Column Width and Row Height, Hiding and Unhiding Columns and Rows, Inserting and Deleting Columns and Rows, Inserting Hyperlink, Header & Footer, Equations & Symbols, Keyboard Shortcuts, Data from external files, Frames, Clipart, Pictures, Files etc., Manual breaks.

Conditional Formatting and Cell Styles:

Conditional Formatting, Finding Cells with Conditional Formatting, Clearing Conditional Formatting, Format as Table and Cell Styles.

Page Layout:

Margins, Orientation, Size of page, Page Breaks, Background, Print, Print area.

UNIT-III

Data Visualization:

Charts: Chart elements: Titles, data labels, creating a New Chart, Types of charts, Using Chart Templates, Selecting Charts and Chart Elements, Moving and Resizing Charts, Changing the Chart Type, Changing the Data Range, Switching Column and Row Data, Choosing a Chart Layout, Choosing a Chart Style, Printing Charts and Deleting Charts.

Editing and Formatting Charts: Formatting Chart Objects, Inserting Objects into a Chart, Changing Chart Labels, Changing Axes Display, Changing the Chart Background, Applying Chart Analysis Lines, Naming Charts, Applying Shape Styles to Chart Elements, Applying Word Art Styles to Chart Elements, Saving Custom Chart Templates.

PivotTables: Creating a PivotTable, Filtering and Sorting a PivotTable data, Manipulating a PivotTables, Applying PivotTable Styles, Creating a PivotChart.

UNIT-IV

Formulas and Functions:

Meaning and Advantages of functions, Creating a Formula, Formula Auditing, Insert function, Finding total in a column or row, Mathematical functions

(Addition, Subtraction, Multiplication, Division, Exponentiation etc.), Statistical functions (Average, Median, Mode, Variance, Standard deviation, Correlation, Regression etc.), Logical functions, Date & Time Functions, The Hlookup and Vlookup Functions, other Formulae & Functions.

Data Representation:

Import external data, Creating a Table, Filtering & Sorting Data into a Table, Data Validation, Consolidation, What-If Analysis, Group, Ungroup, Subtotals and Solver.

Macros: View Macros, Record Macros.

Practical (Total period: 12hrs)

List of Practical's:

- 1) Conditional Formatting (Highlight cell rules, Top / Bottom rules, Data bar, Color scales, Icon sets etc.)
- 2) Graphical Representation (Histogram, Column chart, Line Chart, Pie chart, Bar chart, Scatter plot etc.)
- 3) PivotTable & PivotChart
- 4) Data Analysis Using Formulae & Functions
- 5) Data Representation (Data Validation, Consolidation, What-If Analysis, Group, Ungroup & Subtotals)
- 6) Creating Macros

Books Recommended:

1. Microsoft Office Excel 2007 step by step: Frye, PHI
2. MS Office: Sanjay Saxena, Vikas Publishing House
3. MS Office 2007 in a Nutshell: S. Saxena, Vikas Publishing House
4. MS-Office 2007 Training Guide: S. Jain, BPB Publications
5. Computer Fundamental MS Office – Including Internet & Web, Vitasta Publishing
6. Technology: Anupama Jain(Author), Avneet Mehra, Vitasta Publishing
7. Microsoft Excel Data Analysis and Business Modeling 5th Edition.
8. Learning Computer Fundamentals, MS Office and Internet & Web Technology: D. Maidasani, Laxmi Publications

Evaluation System:

Total marks of Course		100 M
Theory Course	Attendance	10 M
	Final Examination	40 M
	Total	50 M
Practical Course	Attendance	5 M
	Final Examination	40 M
	Oral/viva	5 M
	Total	50 M

Nature of Theory question paper:

- 1) In the theory question paper, there will be 20 Multiple Choice questions (MCQ).
- 2) Each MCQ have four options.
- 3) All MCQ's are compulsory.
- 4) Each MCQ carries 2 marks.

Nature of Practical question paper:

- 1) In the practical question paper, there will be six questions each of 10 marks; a student has to attempt any four questions out of six.
- 2) Evaluation of the questions will be online and should be demonstrated to be examiner.
- 3) Practical examination is of two hours duration which includes viva examination and online demonstration.
- 4) 5 Marks for Viva.

Certification: A certificate will be issued on successful completion of the programme.