

**SES's L. S. RAHEJA COLLEGE OF ARTS AND COMMERCE  
(AUTONOMOUS)**



**Syllabus of Fundamentals of Excel under NEP 2020 vertical - SEC with effect from 2024-25**

**Department of Information Technology and Data Science**

**HoD/Sr. Person of the Department: Prajakta Joshi**

**Date of approval by the BoS: 27/04/2024**

**Approved by the Academic Council: 29/04/2024**

**Ratified by the Governing Body on: 06/05/2024**



<b>Programme: BFM</b>			<b>Semester : I</b>		
<b>Course : Fundamentals of Excel</b>			<b>Code: UGBFMISEC124</b>		
<b>Academic Year: 2024-2025</b>			<b>Batch: 2024-2027</b>		
<b>Teaching Scheme</b>			<b>Evaluation Scheme</b>		
<b>Lectures</b>	<b>Practical</b>	<b>Tutorials</b>	<b>Credits</b>	<b>Internal Continuous Assessment (ICA) (weightage)</b>	<b>Term End Examinations (TEE) (weightage)</b>
<b>30</b>	<b>Nil</b>	<b>Nil</b>	<b>2</b>	<b>20</b>	<b>30</b>

<b>Learning Objectives :</b>	<ol style="list-style-type: none"> <li><b>To provide an overview of Excel interface and basic functionalities</b></li> <li><b>To develop proficiency in intermediate Excel skills such as managing data and working with charts</b></li> <li><b>To learn data analysis techniques such as what-if scenarios, PivotTables, and Lookup functions</b></li> <li><b>To gain knowledge about advanced Excel techniques such as advanced formatting, data analysis with Excel Tables, and using Form Controls</b></li> </ol>
<b>Learning Outcomes :</b>	<ol style="list-style-type: none"> <li><b>Ability to create, manage and format worksheets and workbooks</b></li> <li><b>Understanding of basic and intermediate functions and formulas</b></li> <li><b>Ability to analyze and summarize data using PivotTables and Lookup functions</b></li> <li><b>Ability to create and customize charts and graphics</b></li> </ol>
<b>Pedagogy:</b>	<b>Practical based learning, problem-based learning, peer learning</b>

**Detailed Syllabus: (per session plan)**

**Session Outline for Fundamentals of Excel**

**Each lecture session would be of one hour duration (30 sessions).**

Module	Module Content	Module Wise Pedagogy Used	Module Wise Duration
<b>I</b>	<p><b>Introduction to Excel Functions with Formatting and Proofing:</b>            Introduction to Excel: Introduction to Excel interface, Understanding rows and columns, Naming Cells, Working with excel workbook and sheets            Formatting excel work book: Modifying Columns, Rows &amp; Cells, Perform Calculations with Functions, Date and Time Functions, Financial Functions, Logical Functions, Mathematical Functions, Statistical</p>	Practical based learning, problem-based learning, peer learning	15
	<p>Functions, Text Functions. Sort and Filter Data with Excel, Create Effective Charts to Present Data Visually            Managing Worksheets and Data Filter data range and tables, Summarize filtered data, Enforce data entry criteria, Sort worksheet data, Working with multiple workbooks, Fill Empty Cells, Remove Duplicates, Find and Replace Values</p> <p><b>Advanced calculations and functions</b>            Logical functions - IF and Nested IF functions, Using AND / OR / NOT functions, Text Functions, Date Functions, Time Functions</p> <p><b>Introduction to charts &amp; amp graphics</b>            Worksheet charting, Create standard Charts, Create combo charts, Hierarchy chart, Scatter Chart, Statistic chart, Stock chart, Map chart, Adding Graphic Object, Inserting Different types of Graphics, Drawing graphics, Adding screenshots and using Themes, Printing Charts</p>		
<b>II</b>	<p><b>Data visualization with PivotTables and PivotCharts</b>            Creating and formatting Pivot Table, Sorting and filtering the Pivot Table Data, Modifying Pivot Table, Creating Pivot Charts, using Power Pivot Add-in</p> <p><b>Data Validation and Lookup functions:</b>            Number, Text, Date and Time Validation, Introduction to Vlookup and Hlookup, Xlookup</p> <p><b>Data Analysis in Excel</b>            Performing What-If Scenarios: Using Data Table, Exploring different scenarios, Goal seek, Scenario Analysis, using solver</p> <p><b>Advanced charting techniques:</b>            Creating dynamic charts, Using Form Controls for Interactive Charts, Creating Trendlines and Error Bars, Combining chart types, using Sparklines and Data bars, Conditional Formatting with Charts</p>	Practical based learning, problem-based learning, peer learning	15

## REFERENCE BOOKS

1. Curtis Frye (2021), Excel 2021 Step by Step, Microsoft Press
2. Greg Harvey, Excel 2019 All-in-One For Dummies, Wiley
3. Michael Alexander, Richard Kusleika, John Walkenbach, Excel 2019 Bible, Wiley

## QUESTION PAPER PATTERN

### Internal Continuous Assessment (ICA) Pattern

Particulars	Marks
Presentation/Viva Voce	10
Assignment/Project	10
Total	20

### Term End Examinations (TEE)

#### Question Paper Pattern

Maximum Marks: 30

Duration: 1 Hour

All questions are compulsory.

Question No.	Description	Total Marks
1	A. Full Length Theory Question <b>OR</b>	12
	B. Full Length Theory Question	
2	A. Full Length Theory Question <b>OR</b>	12
	B. Full Length Theory Question	
3	Short Notes ( <b>Any 2 out of 3</b> )	6

The Full length theory questions of 12 marks each may be split up into two smaller problems carrying 6 marks each.