

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



Syllabus of Advanced Excel under NEP 2020 vertical - OE with effect from 2024-25

Department of Information Technology and Data Science

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

Approved by the BoS: 27/04/2024

Approved by the Academic Council: 29/04/2024

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



Programme: Bachelor of Commerce (Management Studies)			Semester : II		
Course : Advanced Excel			Code: UGBMSIIOE224		
Academic Year: 2024-2025			Batch: 2024-2027		
Teaching Scheme			Evaluation Scheme		
Lectures	Practical	Tutorials	Credits	Internal Continuous Assessment (ICA) (weightage)	Term End Examinations (TEE) (weightage)
30	Nil	Nil	2	20 marks	30 marks

Learning Objectives :	<ol style="list-style-type: none"> 1. To provide an overview of Excel interface and basic functionalities 2. To develop proficiency in intermediate Excel skills such as managing data and working with charts 3. To learn data analysis techniques such as what-if scenarios, PivotTables, and Lookup functions 4. To gain knowledge about advanced Excel techniques such as advanced formatting, data analysis with Excel Tables, and using Form Controls 5. To understand the fundamentals of macros and VBA and learn how to use them for advanced analysis and reporting
Learning Outcomes :	<ol style="list-style-type: none"> 1. Ability to create, manage and format worksheets and workbooks 2. Understanding of basic and intermediate functions and formulas 3. Ability to analyze and summarize data using PivotTables and Lookup functions 4. Ability to create and customize charts and graphics 5. Knowledge of advanced Excel techniques such as data
Pedagogy:	Practical based learning, problem-based learning, peer learning

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

Module	Module Content	Module Wise Pedagogy Used	Module Wise Duration
I	Introduction to Excel Functions with Formatting and Proofing: Basic calculations and functions - SUM, AVERAGE, MAX, MIN, COUNT, AutoFill, Absolute, Mixed and Relative Referencing Currency format, Format Painter, Formatting Dates, Manage data by using Flash Fill,	Practical based learning, problem-based	15

	<p>Advanced Paste Special Techniques (Paste formulas, Paste formats, Transpose tables)</p> <p>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>Advanced calculations and functions</p> <p>Logical functions - IF and Nested IF functions, Using AND / OR / NOT functions, Text Functions, Date Functions, Time Functions</p> <p>Introduction to charts & amp graphics</p> <p>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> <p>Data Analysis in Excel</p> <p>Performing What-If Scenarios: Using Data Table, Exploring different scenarios, Goal seek, Scenario Analysis, using solver</p>	learning, peer learning	
II	<p>Data visualization with PivotTables and PivotCharts</p> <p>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>Data Validation and Lookup functions:</p> <p>Number, Text, Date and Time Validation, Introduction to Vlookup and Hlookup, Xlookup</p> <p>Important Excel Functions:</p> <p>INDEX, MATCH, OFFSET, CHOOSE, SWITCH, SumIf, SumIfs, CountIf, CountIfs, AverageIf, AverageIfs, Financial Formulas- PV, NPV and FV functions</p> <p>Introduction to macros and VBA:</p> <p>What are macros? Recording a Macro, What is VBA? Procedures and functions in VBA, Variables in VBA, Using Excel add-ins for advanced analysis and reporting</p> <p>Advanced charting techniques:</p> <p>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, 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, Wile

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 OR B. Full Length Theory Question	12
2	A. Full Length Theory Question OR B. Full Length Theory Question	12
3	Short Notes (Any 2 out of 3)	6

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