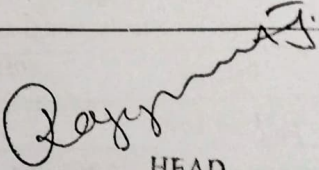


Annexure-I

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT
SYLLABUS

Title of Course	"Advanced Excel for Business Analytics"		
Credit	Theory: 1	Practical: 1	Total: 2
	Total Teaching hours = 45 (15 Theory + 30 Practical)		
UNIT	Course Content		
I	Basic Excel & Introduction to Free AI-Enabled Tools		
	- Introduction to Excel: Basic Navigation, Cells, Rows/Columns and Formatting		
	- Basic Mathematical Functions: Addition, Subtraction, Multiplication, Percentage and Division, Sum, Average, Count, Max, Min		
	- Data Entry, Editing and Cell References (Relative, Absolute & Mixed)		
	- Sorting and Filtering Data, Find & Replace		
	- Flash Fill: Pattern-Based Automatic Data Entry (built-in, no extra cost)		
	- Overview of Free AI Tools for Learning Support: Use of free web-based AI tools to learn Excel concepts, functions, and shortcuts.		
	- Practice		
	- Unit Test		
II	Functions in Excel & Free AI-Assisted Insights		
	- Numeric, Mathematical, Statistical, Logical, Text, Date & Time Functions		
	- COUNTIF, COUNTIFS, SUMIF, SUMIFS etc.		
	- IF, IFS, AND, OR, NOT Functions		
	- Conditional Formatting		
	- Lookup Functions: VLOOKUP, INDEX-MATCH and XLOOKUP; HLOOKUP and Dynamic Array Functions (introductory level)		
	- Charts and graphs in Excel		
	- Formula Help Using Free AI Tools: Using free AI tools to create, understand, and troubleshoot Excel formulas.		
	- Practice		
	- Unit Test		
III	Advanced Excel, Automation & Free Built-In Analytics Tools		
	- Data Validation		
	- What-If Analysis, including Goal Seek		
	- Pivot Table: Creating and Analyzing, Pivot Charts and how to create pivot table using multiple sheets		
	- Slicers and Filters		
	- Macros (VBA): Automating tasks in Excel using VBA macros.		

	- Power Query and Power Pivot: Transforming, analyzing, and managing data in Excel.
	- Forecast Sheet: Creating time-series forecasts using Excel's built-in forecasting tools.
	- Practice
	- Unit Test
IV	Business Analytics Case Study & Project Using Free Tools
	- Data Cleaning and Preparation: Using Flash Fill and Power Query for data cleaning
	- Sales and Financial Data Analysis: Using Forecast Sheet for forecasting
	- HR/Marketing Data Analysis: Using PivotTables and Analyze Data
	- Interactive Dashboard Development: Using Charts, Pivot Charts, and Slicers
	- Responsible Use of AI Tools: Protecting data privacy and verifying AI-generated results
	- Project Presentation, Practice and Final Assessment
Teaching Methodology	Lectures, Demonstrations, Hands-on practical sessions in Excel using built-in free tools (Flash Fill, Analyze Data, Forecast Sheet, Power Query) and free web-based AI chat assistants for concept support, Case studies, Quiz, project work
Evaluation Method	Internal Assessment : 50 Marks External Assessment : 50 Marks


 HEAD
 Department of Statistics
 Veer Narmad South Gujarat University,
 Surat-395007