Mahatma Gandhi University
Kottayam

Programme						
Course Name	**Mastering Spreadsheets**					
Type of Course	**MDC**					
Course Code	**MG2MDCCSC101**					
Course Level	**100**					
Course Summary	This course covers fundamental spreadsheet skills, advanced formula application, data visualization techniques, pivot table analysis, and macro automation for effective data processing, analysis, and visualization.					
Semester	2	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		2	0	1	0	60
Pre-requisites, if any						

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
1	Demonstrate the fundamental concepts of spreadsheet packages	U	1
2	Apply functions, formulas, charting techniques, and pivot tables for data representation and analysis	A	2
3	Utilize spreadsheet software to perform numerical computations and analyze data across various datasets	A	2

**Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)*

COURSE CONTENT

Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	1.1	Spreadsheet as a processing, analysis and visualisation tool, Layout of a worksheet- Title bar, Menu bar, Formula bar.	5	1
	1.2	Cell addressing, Data entry, Data Types, Data formatting, Data selection, Named ranges, Importing Data.	5	1
	1.3	Fill handle, Autofill, Autosum, Borders, Find and Replace, Sort, Filter, Advanced filter, Conditional formatting.	5	1
2	2.1	Formulas- Absolute addressing and relative addressing, IF statement, Functions- Categories, Exploring functions -Mathematical, Statistical, Text, Financial, and Date functions.	6	2
	2.2	Data representations and comparison using charts and pivot table- Different type of charts, Creation of charts, Setting Chart parameters, Customising charts, Creating and Manipulating Pivot table.	6	2
	2.3	Advanced features - Macros, Advantages of Macro, Creating and editing a macro, running a macro, Exporting Data, Printing data and result.	3	2
3	3.1	Basic Spreadsheet Skills: Create a simple spreadsheet including various types of data, format cells, use basic functions like autosum, and apply conditional formatting to highlight important information.	8	3
	3.2	Formula and Functions: Create a spreadsheet and apply formulas and functions for data computation (Mathematical, Statistical, Text, Financial, and Date functions).	6	3

	3.3	Data Visualization with Charts: Explore different types of charts to represent data by adjusting chart parameters and customizing visual elements for clarity and impact.	8	3
	3.4	Pivot Table Analysis: Create a pivot table to analyze data, explore different dimensions, and summarize information using calculated fields. Macro Automation: Automate repetitive tasks using macros.	8	3
4		**Teacher Specific Content**		

Teaching and Learning Approach	**Classroom Procedure (Mode of transaction)** Lecture, Practical, Demonstration through ICT tools
Assessment Types	**MODE OF ASSESSMENT** **A. Continuous Comprehensive Assessment (CCA)** **CCA for Theory: 15 Marks** 1. Written test 2. Assignments **CCA for Practical: 15 Marks** 1. Practical assignments 2. Lab Record 3. Observation of practical skills 4. Viva
	B. Semester End Examination **ESE for Theory: 35 Marks (1 Hr)** **Written Test(35 Marks)** Part A: MCQ (15*1=15 Marks) Part B: Short Answer Questions (Answer all) - (10*2=20 Marks) **ESE for Practical: 35 Marks (1.5 Hrs)** 1. Procedure - 10 Marks 2. Output - 10 Marks

	2. Viva - 10 Marks 3. Record - 5 Marks

REFERENCES

1. Documentation Team, LibreOffice. LibreOffice 7.1 Calc Guide. N.p., Jean Hollis Weber, 2021.

SUGGESTED READINGS

1. Documentation Team, LibreOffice. "Getting Started with LibreOffice 6.0". Friends of OpenDocument, INC, 2018.
2. https://documentation.libreoffice.org/assets/Uploads/Documentation/en/GS7.3/GS73-GettingStarted.pdf