

POSTGRADUATE AND RESEARCH DEPARTMENT OF MATHEMATICS

X

CERTIFICATE COURSE DETAILS

NAME OF THE COURSE

Basics of Microsoft Excel

COURSE DETAILS

Total hours: 30

COURSE COORDINATOR

Dr. Tintumol Sunny

PARTNERSHIP WITH

MATH Lab Cochin

ABOUT COLLEGE

Christ College (Autonomous) Irinjalakuda, established in the year 1956 by CMI fathers has always been place where young generations are moulded towards a bright future. College has excellent infrastructure, with state-of-the-art laboratories, seminar rooms and lecture halls. The campus is Wi- Fi enabled. Presently College is house for 4500+ students. 200 teaching staff and 45 supporting staff. The strength of the College lies in its hardworking and tech savvy teachers who are eager to involve in all matters of students. The lush green campus with gardens and open gym is moving towards the next phase on education both offline and online.

AIM OF THE COURSE

To understand the spreadsheet software Microsoft Excel, and to enter, edit, format and analyze data using Excel. To construct formulae, create and modify charts in Excel.

PROGRAM SPECIFIC OUTCOME

- To understand the spreadsheet software Microsoft Excel
- To Arrange and analyze data in MS Excel

SUGGESTED METHODOLOGY OF TEACHING AND LEARNING

- Online/Offline classes
- Practical sessions on Excel
- Practicing analysis of various data in Excel

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- C01	Understanding Excel and its interface	

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SYLLABUS

Module 1- Introduction to Excel

Introduction- Uses of Excel- How to access- how to open- Applications-Features

Understanding excel- Column- Row- Cell- Formula bar- Ribbon- Customizing Ribbon-

Worksheet and workbook- Shortcuts- Save options

Module 2- Data entry and Analyzing

Entering data in different Formats- Auto fill- Splitting Data- Transpose of data- Sort and filter- Tables

Analyzing data using charts, pie diagrams, bar diagrams etc.- Recommended Charts-Pivot Tables

Certificate Course- Basics of Microsoft Excel - CPCC48

Assessment Procedure

Assignments : 40%

Examination (Theory and Practical) : 60%

Course Outcomes

Upon completion of this course, students were able to:

- 1. Demonstrate proficiency in navigating the Excel user interface and performing basic operations.
- 2. Input, format, and manipulate data in spreadsheets effectively.
- 3. Create basic data visualizations such as charts and graphs.
- 4. Apply Excel skills to solve simple real-world business problems

BASICS OF MS EXCEL ATTENDANCE

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Affiliated to University of Calicut and Reaccredited by NAAC with 'A++' & SAAC 'A+' www.christcollegeijk.edu.in

POSTGRADUATE AND RESEARCH DEPARTMENT OF MATHEMATICS

Certificate

This is to certify that

Ms./Mr. <u>ATHULTA KRISHNA K U [CCAWSMIDOS]</u> has successfully completed the certificate course on **Basics of Microsoft Excel** with Grade <u>A</u>, conducted by Postgraduate and Research Department of Mathematics, Christ College(Autonomous), Irinjalakuda during the academic year 2023-24.



Certificate Course-Basics of Microsoft Excel - CPCC48

Number of students	34
Date of examination	22-01-2024
Total students who passed exam	31
Total course duration	30 hrs

Teacher Coordinator Report

Feedback analysis:

- Students found the course well-structured and easy to follow, making it suitable for beginners.
- The practical exercises and real-life examples helped participants understand key Excel functions and their applications.
- 100% of students appreciated the interactive sessions, which made learning Excel engaging and enjoyable.
- Participants reported significant improvement in their ability to use Excel for tasks such as data analysis, formatting, and chart creation.

Course Coordinator: Tintumol Sunny

Model Test Paper (Theory)

Certificate Course Exam in Basics of Microsoft Excel

Time: 20 minutes Total Marks: 10 Instructions: Choose the most appropriate answer for each question.

- Which of the following is NOT a valid way to create a new Excel workbook?

 a) Click the "New" button on the Quick Access Toolbar
 b) Go to File > New
 c) Press Ctrl + N
 d) Right-click on the desktop and select "New > Microsoft Excel Worksheet"
- 2. What is the formula to calculate the sum of values in cells A1 to A10?
 a) =SUM(A1:A10)
 b) =TOTAL(A1,A10)
 c) =ADD(A1,A10)
 d) =SIGMA(A1:A10)
- 3. Which of these Excel formatting options can you use to change the font style of a cell? a) Font
 - b) Border
 - c) Alignment
 - d) Number
- 4. Which chart type is best suited to display a comparison of values over time?
 - a) Pie chart
 - b) Bar chart
 - c) Line chart
 - d) Scatter plot
- 5. If cell B5 contains the formula =A1A2, what happens when you make cell A1 an absolute reference?
 - a) The formula becomes =A\$1A2
 - b) The formula becomes =\$A1A2
 - c) The formula becomes =A1\$A2
 - d) The formula becomes = A^{1*A2}
- 6. You want to highlight all cells in the range C3:E10 that have a value greater than 80. Which Excel feature should you use?
 - a) Conditional Formatting
 - b) Data Validation
 - c) Find and Replace
 - d) Cell Styles

- 7. How would you sort a list of names in alphabetical order (A to Z) using Excel?
 a) Select the range and go to Home > Sort & Filter > Sort A to Z
 b) Select the range and press F9
 - c) Go to Data > Sort > Ascending
 - d) Right-click the range and select "Sort Ascending"
- 8. Which Excel function calculates the percentage change between two values?
 a) GROWTH()
 b) PERCENT_CHANGE()
 c) DELTA()
 d) CHANGE()
- 9. You have a name column with both first and last names. What Excel feature would you use to split this into separate first name and last name columns?
 - a) Text to Columns
 - b) Flash Fill
 - c) Concatenate
 - d) TRIM()
- 10. Which Excel feature allows you to create a dashboard with interactive charts and reports?
 - a) PivotTables
 - b) Sparklines
 - c) Power Query
 - d) Power BI

Model Test Paper(Practical)

Questions:

- 1. Explain the process of creating a new Excel workbook and adding multiple worksheets within it. Describe the purpose and use of sheet tabs.
- 2. Format the data in the following Excel range (A1:D12) to make it more readable and visually appealing. Include at least 3 different formatting techniques.
- 3. Create a simple bar chart to visualize the monthly sales data provided in the worksheet. Ensure the chart has an appropriate title and axis labels.
- 4. Write the steps to apply conditional formatting to a range of cells, such that any value greater than 90 is highlighted in green, and any value less than 60 is highlighted in red.
- 5. Imagine you want to calculate the year-over-year percent change in quarterly revenue for your company. Provide the Excel formula you would use to perform this calculation.
- 6. Your manager has shared an Excel file containing customer information. Write step-bystep instructions on how you would use the Text to Columns feature to split the "Full Name" column into separate "First Name" and "Last Name" columns.

Report on Certificate Course: Basics of Microsoft Excel - CPCC48

The "Basics of Microsoft Excel" certificate course was designed to provide 2nd year undergraduate students with a solid foundation in using Excel for data management, analysis, and visualization. The curriculum was structured to cover the essential Excel skills required for academic coursework as well as entry-level professional roles.

The course began with an introduction to the Excel interface, including workbooks, sheets, cells, and the various ribbon tabs and toolbars. Students learned how to effectively input, format, and edit data within spreadsheets.

Course Objectives

- Navigate the Excel user interface efficiently, including the ribbon, toolbars, and shortcut keys.
- Apply basic formatting options to enhance the appearance and readability of spreadsheets
- Create, open, and manage Excel workbooks and worksheets
- Enter, edit, and format data in cells using appropriate data types

Course Details

Couse in charge : Ms. Tintumol Sunny

Duration: 30 hours

Syllabus:

Module 1- Introduction to ExcelIntroduction- Uses of Excel- How to accesshow to open- Applications-FeaturesUnderstanding excel- Column- Row- Cell-Formula bar- Ribbon- Customizing Ribbon-Worksheet and workbook-Shortcuts- Save options

Module 2- Data entry and AnalyzingEntering data in different Formats- Auto fill- Splitting Data- Transpose of data- Sort andfilter- TablesAnalyzing data using charts, pie diagrams, bar diagrams etc.- Recommended Charts-Pivot Tables

Assessment Procedure

Assignments : 40%

Examination (Theory and Practical) : 60%

Course Outcomes

Upon completion of this course, students were able to:

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