# FCSCC12 DATA ANALYSIS USING EXCEL

#### SYLLABUS & ASSESSMENT PROCEDURE

#### **COURSE DESCRIPTION:**

Data analysis using Excel is a comprehensive course that aims to equip students with the necessary skills to perform Sophisticated data analysis. The course covers a wide range of data analysis techniques and tools available in Excel, enabling the students to gain a deep understanding of data manipulation, visualization and interpretation. Students will be able to learn MS Excel Features and how research activities can be performed effectively and efficiently using MS Excel.

#### **SYLLABUS**

## FCSCC12- CERTIFICATE COURSE IN DATA ANALYSIS USING EXCEL Credit: 2 Duration: 30 Hours

#### **COURSE OBJECTIVES**

- To familiarize oneself with Excel's Basic features
- To gain skills on data visualization using MS Excel.
- To acquire skills for data analysis using MS Excel.

#### **COURSE OUTCOMES**

On successful completion of the course, the students will be able to

CO1 Knowledge about MS Excel and its operations, representing data diagrammatically and

graphically using MS-Excel.

- CO2: Ability to compute statistical measures analysis using MS-Excel
- CO3: Knowledge about concepts related to hypothesis, computation of large sample tests using

MS-Excel.

CO4: Ability to identify and compute small sample tests, Chi-square tests using MS-Excel.

#### Module 1

#### MEANING OF STATISTICAL REPRESENTATION OF DATA

# Module 2

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CLASS IFICATION AND ORGANISATION OF DATA

Classification, types, tabulation of data, parts of a table, types of tables, general rules of tabulation.

#### Module 3

REPRESENTATION OF DATA

Significance of diagrams, graphs, types of diagrams and graphs, limitation of diagrams and graphs. Module 4

INTRODUCTION TO EXCEL

The Excel Environment, Uses of Excel, Excel software, Spreadsheet window panel, Title Bar, Menu Bar, Standard Toolbar, Formatting Toolbar, the Ribbon, File Tab and Backstage View, Formula Bar, Workbook Window, Status Bar, Task Pane, Workbook & sheets

#### Module 5

#### CREATING BASIC WORKBOOKS

Creating New Workbooks, Saving Workbooks, Closing Workbooks, Opening Workbooks, Selecting Cells, Entering Values into Cells, Auto Filling Cells, Cutting, Copying & Pasting Data, Selecting Columns and Rows, Adjusting Column Width and Row Height, Hiding and Unhiding Columns and Rows.

Formatting Cells, moving between Worksheets, Selecting Multiple Worksheets, Inserting and Deleting Worksheets, Conditional Formatting, Finding Cells with Conditional Formatting.

#### Module 6

FORMULAS & FUNCTIONS: Writing Formulas, Using AutoSum, Using the IF, AND, and OR Functions, Date & Time Functions.

TABLES: Creating a Table, Adding and Editing Records, Inserting Records and Fields, Deleting Records and Fields, Sorting Data, Custom Sort Orders, Using Filters.

#### Module 7

CHARTS: Creating Charts, Selecting Charts and Chart Elements, Changing the Chart Type, Changing the Data Range, Switching Column and Row Data, choosing a Chart Layout, choosing a Chart Style, Inserting Objects into a Chart, Changing Chart Labels, Changing Axes Display, Changing the Chart Background, Applying Chart Analysis Lines, Naming Charts, Applying Shape Styles to Chart Elements, Applying Word Art Styles to Chart Elements.

PIVOT TABLES. Creating Pivot Tables and Pivot Charts, manipulating a Pivot Table, Changing Calculated Value Fields, Applying Pivot Table Styles, creating a Pivot Chart, Setting Pivot Table Optices, Sorting and Filtering Pivot Table Data.

#### REFERENCES

- Microsoft Excel Latest Version Inside Out Mark Doge and Craig Stinson PHI Learning Private Limited, New Delhi – 110001.
- Excel 2013 Bible; John Walkenbach, Wiley
- Financial Analysis and Modelling using Excel and VAB: Chandan Sengupta, Wiley
- Excel Data Analysis modelling and Simulation: Hector Guerreor, Springer
- Microsoft Excel 2013: Data Analysis and Business Modelling: Winston, PHI
- Excel Functions and Formulas: Bernd Held, BPB Publications.

#### STRATEGIES FOR INSTRUCTION

Offline classes may be adopted for theory and practical sessions. Lecture cum demonstration method can be provided for theory papers and hands-on training and demonstrations can be provided for practical classes

#### SCHEME OF EVALUATION

METHOD OF EVALUATION			
Assessment Methods	Criteria	Marks	Weightage
Formative Assessment	Attendance	4	25%
(FA)	Assignment/Project/Activities/Reports	6	-
Summative Assessment (SA)	Test Paper	30	75%
	Total	40	100

#### ATTENDANCE

Attendance	Marks
90-100%	4
85-89.9%	3
40-84.9%	2
75-79.95	1
<75%	0

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#### **GRADING POLICY**

Grade	Percentage of total marks (FA+SA)
Α	80% & above
В	60-79.9%
С	50-59.9%
D	40-49.9%
Not qualifying	<40%



#### MODEL QUESTION PAPER

## KAHM UNITY WOMEN'S COLLEGE, MANJERI DEPARTMENT OF HOME SCIENCE FCSCC12- DATA ANALYSIS USING EXCEL

#### Time: 1 Hour

Max Marks: 30

#### Section A

# Answer at least ten questions. Each question carries 3 marks.

### All questions can be attended. Overall ceiling 30.

- 1. Write the general rules of tabulation
- 2. What are the limitation of diagrams and graphs
- 3. Write the uses of Excel
- 4. Write the classification, types and tabulation of data
- 5. Which are the types of diagrams and graphs
- 6. Write on Title bar, menu bar, standard tool bar and formatting tool bar
- 7. Write a brief note on Pivot tables
- 8. How can create new workbooks
- 9. Write the method of selecting cells, entering values into the cells and auto filling the cells
- 10. Write about selecting charts and chart elements
- 11. How can hide and unhide columns and rows
- 12. Write about "Adding and Editing Records"
- 13. Write about switching column and row data
- 14. How can change the chart background
- 15. How can apply shape styles to chart elements



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