DEVA MATHA COLLEGE KURAVILANGAD

Affiliated to Mahatma Gandhi University, Kottayam



SYLLABUS

OF

ADD-ON COURSE

IN

Data Analysis using Excel

Academic Year: 2022-23



DEVA MATHA COLLEGE KURAVILANGAD

DEPARTMENT OF ECONOMICS

Add on Courses offered for Students : 2022-2023

1. Fundamentals of Practical Banking DMCK/ ECON/AD 05/2022 2. English for Life Skills DMCK/ ECON/AD 06/2022 3. Data Analysis Using Excel DMCK/ ECON/AD 07/2022

Department Coordinator: Mr. Sony Jacob

Title: Data Analysis using Excel Instructional Hours: 30 hours Duration: 3 months Mode of Instruction: Theory- Online Mode and Practical- Offline Mode Intake Capacity: 30 Eligibility: Basic Computer Knowledge

DEVA MATHA COLLEGE KURAVILANGAD ADD-ON COURSE FOR THE YEAR 2022-23

Course Objectives:

- 1. To use different functions of MS Excel with regard to data analysis.
- 2. To understand the principles behind data mining, importing data and organizing data.
- 3. To apply statistical analysis and technologies on data to find trends, high level visual summaries and solve problems.
- 4. To start data analysis and modeling.

Module 1: Introduction to Microsoft Excel (10 hours)

Understanding the Excel- ribbon- Ribbon components- Understanding worksheet & workbook-Customization-Important Excel shortcuts.

Arithmetic Operations in Excel: Creating Excel sheet & entering data-Format Data (column name bold, align data, enclose data in boxes, and set the print area, print preview & page layout)

Data validation in Excel: Filtering, Grouping and Sorting

Module 2: Excel Functions (5 hours)

Basic Formulas & Functions: Formulas-Numeric functions-string functions-date time functions-VLOOKUP functions, Logical Functions: IF, AND, OR Nested IF & NOT

Module 3: Charts & Budget preparation (5 hours)

Charts: Pie, bar, column, Line, Combo charts (plotting charts).

Budget: Income sheet preparation, Expenditure sheet, Actual Annual saving & expected actual savings.

Module 4: Data Analysis using Excel (10 hours)

Importing & Entering Data: Importing xml & csv files, Entering and arranging data.

Creating Pivot Tables: Creating one dimensional pivot table with column names and 2 dimensional pivot tables (Practical).

Basic data analysis: Descriptive statistics, Correlation, Regression & its interpretation

References

Data Analysis with Excel by Manisha Nigam, BPB Publications. ISBN:9789388176675

Data Analysis using Excel Tutorial by edureka.

Assessment Procedure

Internal:

Multiple Choice Questions based Test of **10 marks** (10 Questions) based on theory.

Practical Test 10 marks based on basic functions and formulas

External:

Multiple Choice Questions based Test of 40 marks (20 Questions) based on theory.

Practical Test of **20 marks** based on basic functions and formulas, data sorting, data visualization and budget.

Report **20 marks** Time series data analysis including Descriptive statistics, Correlation, Regression & its interpretation

Grading

4.50 to $5.00 - A^+$ - Excellent

 $4.00 \ to \ 4.49 - A - Very \ Good$

3.50 to $3.99-B+\mbox{-}$ Good

3.00 to 3.49 - B - Average

Below 3.00 – Below Average



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