

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES

Programme: B. Tech (Minor in Economics)

Course Title: Data Analysis and Software Applications

Course Category: Minor

Course Code: HSME 404

Credits: 3 (L-2, P-2)

Semester: 8th

Internal: 50 Marks

Theory: 50 Marks

Total: 100 Marks

Time: 3hrs

Course Objectives

- To identify different functions and components of Excel Spreadsheet
- To get expertise in constructing formulas, data representation through graphs
- To get familiar with Pivot Tables and to analyze the real time data

Instructions for Examiner

The number of questions to be set will be five, at least one from each unit. The examinees will be required to attempt all five questions. All questions shall carry equal marks.

Unit I

Introductions Interface, Tabs & Ribbons, Cell Styles, Paste Special, Document Windows, formatting numbers, custom and special format, modifying rows and columns; Formulas and Formatting Using Operations, Common Formulas, Using relative and absolute references, Autofill a series,

Unit II

Lookups & Conditional Logic Vlookup, Hlookup, If Statements, nestedIF, AND, OR, NOT, SUMIF, AVERAGEIF, COUNTIF, COUNTIFS, Case formulas,

Unit III

Chart Types, Update Chart, Line Chart, Scatter Chart, legenda, Data labels,

Unit IV

Filter and Pivot Tables Group and ungroup, Sort Data, Filter Data, Advance Filter, Conditional Sorting and Filtering, Creating Pivot Tables, Pivot charts, Basics of SPSS and STATA.

Course Outcomes

The students would be able to develop the skills of handling the large data set in more user friendly manner and also to give more meaningful interpretations to the scattered data for effective decision making.

Suggested Readings

1. Microsoft Excel 2016 Bible: The Comprehensive Tutorial Resource, John Walkenbach, Wiley Publications
2. Microsoft Excel 2019, Data Analysis and Business Modelling, Wayne Winston, 6th Edition, Microsoft