

ANURAG ENGINEERING COLLEGE

(An Autonomous Institution)

I Year MBA -IISemester

L	T/P	C
0	4	2

(A92006) STATISTICAL DATA ANALYSIS -PRACTICAL (MS-EXCEL LAB)

Course aim: The course aims is to understand MS Excel for applying statistical tools learnt in RMSA.

Prerequisite: Statistical Analysis Course

PART A

Week 1:

- a) EXCEL – Introduction, Uses, Functions and Features.
- b) Getting started with excel: Opening New Workbook, Saving Workbook, opening an Existing workbook, Inserting / Deleting / Copying / Moving Worksheets,

Week 2:

- a) Working with Data – Entering, Cut, Copy, Paste, Paste Special in the Worksheets and
- b) general organization of the worksheet and workbook.
- c) Highlights and main functions: Home, Insert, page layout, formulas.
- d) Highlights and main functions: Data, Review, View, add-ins.
- e) Using the Excel help function.

Week 3 & 4:

- a) Customizing the Quick Access Toolbar.
- b) Creating and Using Templates.
- c) Formatting Data and Using the Right Mouse Click.
- d) Using Headers and Footers.
- e) Saving, Page Setup, and Printing.

Week 5:

- a) Manipulating Data, using Data Names and Ranges, Filters and Sort and Validation Lists.
- b) Data from External Sources.
- c) Using and Formatting Tables.
- d) Basic Formulas and Use of Functions.

Week 6:

- a) Using Charts and Graphs.
- b) Securing the Excel Document (Protect Cells and Workbook).
- c) Group / Ungroup / Subtotals

PART - B

Week 7:

Data Analysis:

- a) What-if analysis – Goal Seek, Scenario Manager, Solver
- b) Pivot Tables and Pivot Charts.

Week 8 & 9:

- a) Tabulation, bar diagram, Multiple Bar diagram, Pie diagram,
- b) Measure of central tendency: mean, median, mode,

c) Computing Standard Deviation and Variance

Week 10 & 11:

Time series: forecasting Method of least squares, moving average method. Inference and discussion of results.

Week 12 & 13:

ANOVA, t-Test, Chi-Square Test

Week 14:

Case Study and Review

Reference Books:

1. Glyn Davis & Branko Pecar "Business Statistics Using Excel" Oxford University Press, 2012.
2. D P Apte : Statistical Tools for Managers USING MS EXCEL, Excel, 2012.
3. David M Levine, David. F. Stephan & Kathryn A. Szabat, Statistics for Managers – Using MS Excel, PHI, 2015.
4. Bruce Bowerman, Business Statistics in Practice, TMH, 5/e 2012.
5. Shelly, MS Office, 2007, Cengage, 2009.
6. Ajai. S. Gaur, Sanjaya S. Gaur, Statistical Methods for Practice and Research, Response, 2009

Course Outcome: The learning outcome is that the students should be able to:

1. Analyze the data to draw inference for decision making.
2. Know the application of statistical measures of central tendency.
3. Comprehend the relation between all variables.
4. Apply the principles of moving averages in time series.
5. Apply the tests like ANOVA and Chi square.

CO-PO Mapping:

CO's / PO's	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO 1		✓	✓	✓					✓			✓
CO 2		✓		✓			✓					✓
CO 3		✓		✓					✓			✓
CO 4				✓						✓		✓
CO 5				✓								✓