**Curriculum plan (Even Semester 2021-22)**

**Teacher Name: Dr. Anjali Bansal (2 lectures per week. Units 1, 4 and 5 to be covered)**

**Paper name: Basic Computational Techniques for Data Analysis**

**Class type: BA Prog. 6th Sem, SEC paper**

**Paper shared with: Ms. Madhuri (2 lectures per week. Units 2, 3 and 5 to be covered)**

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| **Unit/ Content to be taught** | **Month wise schedule to be followed** | **Tests/Assignments/ Revision/Presentations etc** |
| Unit -1: Introduction to MS Excel: Spreadsheet basics and inputting of data, word processing and presentation of data using graphs and tables.  (i) Inputting data; (ii) Selecting data  (iii) Multiplication, Division and Addition; (iv) Formatting Cells  (v) Hide/unhide columns; (vi) Sorting Data; (vii) Filtering Data  (viii) Freezing and Unfreezing Headers | January  Week 1  Week 2  Week 3  Week 4 | ... |
| Unit -1: Introduction to MS Excel: Spreadsheet basics and inputting of data, word processing and presentation of data using graphs and tables.  (ix) AUTO SUM and SUMIF commands;  (x) Using MAX, MIN, COUNT, COUNTIF and POWER command;  (xi) Pivot Tables;  (xii) Line Graph, Column Chart, Histogram, Pie Chart and Scatter Plot. | February  Week 1  Week 2  Week 3  Week 4 | Computer based test (online) |
| Introduction to economic and business data sets available in the public domain, such as from the NSE, BSE, RBI, MOSPI, World Bank, UN, etc.  NSE, BSE  RBI, MOSPI  World Bank, UN | March  Week 1  Week 2  Week 3  Week 4 | Computer based test |
| Revision, Test and Presentations  Revision | April  Week 1  Week 2  Week 3, 4 | Computer based test  Presentations  Revision |

**Guidelines and References**

Unit -1

Introduction to MS Excel: Spreadsheet basics and inputting of data, word processing and

presentation of data using graphs and tables.

This unit should cover: (i) Inputting data; (ii) Selecting data; (iii) Multiplication, Division and

Addition; (iv) Formatting Cells; (v) Hide/unhide columns; (vi) Sorting Data; (vii) Filtering Data;

(viii) Freezing and Unfreezing Headers; (ix) AUTO SUM and SUMIF commands; (x) Using

MAX, MIN, COUNT, COUNTIF and POWER command; (xi) Pivot Tables; (xii) Line Graph,

Column Chart, Histogram, Pie Chart and Scatter Plot.

References: MS EXCEL 2010 manual (available free online), or other Excel manuals.

Unit IV

Introduction to economic and business data sets available in the public domain, such as from the

NSE, BSE, RBI, MOSPI, World Bank, UN, etc.

Any of these datasets may be used for demonstrating the statistical concepts studied in the course

Unit V

Preparation of a project report based on data available in the public domain, using concepts studied in units II and III.

Marking scheme:

Internal assessment of 25 marks, comprising: (a) 5 marks for attendance, (b) 10 marks for written

test, (c)10 marks for computer-based test

End Semester assessment of 75 marks, comprising: (a) 25 marks for project to be submitted before the final exam, and (b) 50 marks for a written final exam