B.Com (Digital) SKILL ENHANCEMENT ELECTIVE COURSE(SEC)

SEMESTER VI (BCDB33603T): COMPUTERISED STATISTICAL DATA ANALYSIS

Max. Marks: 100

External: 70

Internal: 30 Pass: 40% Credits: 4

Objective:

Equip the students with the use of software and electronic packages in the process of analysis of statistical data and testing significance for the intended use.

INSTRUCTIONS FOR THE PAPER SETTER/EXAMINER:

- 1. The syllabus prescribed should be strictly adhered to.
- 2. The question paper will consist of three sections: A, B, and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 10 marks each. The candidates will attempt two questions from each section.
- 3. Section C will have fifteen short answer questions covering the entire syllabus. Each question will carry 3 marks. Candidates will attempt any ten questions from this section.
- 4. The examiner shall give a clear instruction to the candidates to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.
- 5. The duration of each paper will be three hours.

INSTRUCTIONS FOR THE CANDIDATES:

Candidates are required to attempt any two questions each from the sections A and B of the question paper and any ten short questions from Section C. They have to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.

Section A

Sampling Theory and Survey Instruments: Meaning, Importance and Limitations, Probability and Non- Probability Sampling Techniques; Identification of Respondents; Development of Survey Instruments, Testing the survey instruments and Collection of data through survey; Secondary data sources and Collection of data from secondary sources; Reliability and Validity of data.

Testing of Significance of Results: Parametric and Non-parametric tests; Testing the significance of results using Parametric and non-parametric tests; Testing the hypothesis and Interpretation of results.

Data Analysis using Microsoft Excel: Spreadsheet - Concepts, Managing worksheets; Formatting, Conditional formatting, Entering data, Editing, Printing and Protecting worksheets; Handling operators in formula, Project involving multiple spreadsheets, Organizing Charts and Graphs; Working with Multiple worksheets; Controlling worksheet views, Naming cells and cell ranges.

Section B

Data Analysis using Statistical Package: User Manual, Preparing data, fusing or analysis, basic usage of software (import/export of data, commands like open, save, etc., Applying Basic Statistical Analysis; Quantitative and Qualitative data Analysis, Descriptive analysis, Testing the significance of one variable, two variables and multi-variables data; Security and control of information systems.

Ethical and Social dimensions in the use of technology for data analysis.

Suggested Readings:

- 1. Budnick, P. Applied Mathematics. McGraw Hill Publishing Co.
- 2. Elmasari, Ranez and Shamkant B. Navathe, *Fundamentals of Database Systems*, Pearson Education
- 3. Gupta, S.C. Fundamentals of Statistics, Himalaya Publishing House.
- 4. Gupta, S.P. and Gupta, Archana. *Elementary Statistics*. Sultan Chand and Sons, New Delhi.
- 5. Jain Hem Chand and Tiwari, H. N. (2019). *Computer Applications in Business*, Taxman Publications
- 6. Levin, Richard and Rubin, David S. *Statistics for Management*, Prentice Hall of India, New Delhi
- 7. Madan, Sushila, Computer Applications in Business. Scholar Tech Press.
- 8. Mathur Shruti and Jain, Pooja. *Computer Applications in Business*. Galgotia Publishing Company
- 9. Mizrahi and John Sullivan. *Mathematics for Business and Social Sciences*. Wiley and Sons.
- 10. Schaum's Outlines Series. McGraw Hill Publishing Co.
- 11. Sharma, J. K. Business Statistics. Pearson Education.
- 12. Sharma S.K. and Bansal, Mansi. Computer Applications in Business. Taxman Publications.
- 13. Spiegel, M.R. Theory and Problems of Statistics, 201
- 14. Thukral, J.K. Mathematics for Business Studies, Mayur Publications
- 15. Vohra, N. D. Business Mathematics and Statistics, McGraw Hill Education (India) Pvt Ltd
- 16. Wayne, Winston. Data Analysis & Business Modelling, PHI.