RANCHI UNIVERSITY

IV. <u>CORE COURSE</u> [CCCOM104]: (Credits: Theory-04, Tutorial-01)

Marks: 30 (MSE: 20Th. 1Hr + 5Attd. + 5Assign.) + 70 (ESE: 3Hrs)=100 Pass Marks (MSE:17 + ESE:28)=45

Instruction to Question Setter:

Mid Semester Examination (MSE):

There will be **two** groups of questions in written examinations of 20 marks. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type five** questions of five marks each, out of which any three are to be answered.

End Semester Examination (ESE):

There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of five questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type six questions of fifteen marks each, out of which any four are to be answered.

Note: There may be subdivisions in each question asked in Theory Examinations

The Mid Semester Examination shall have three components. (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each, (b) Class Attendance Score (CAS) of 5 marks and (c) Class Performance Score (CPS) of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).

BUSINESS STATISTICS

Theory: 60 Lectures; Tutorial:15 Hrs

Objective:

The objective of this paper is to equip students with some of the important statistical techniques for managerial decision making and to provide ground for learning advanced analytical tools used in research.

Contents:

<u>Unit I: Univariate Analysis –</u>

An over view of Central Tendency, Dispersion and Skewness.

Unit II: Theory of Probability and Probability Distributions:

Approaches to calculation of probability. Marginal, joint and conditional probabilities. Probability rules. Bayes' theorem. Expected value and standard deviation of a probability distribution. Standard probability distributions - Binomial, Poisson, Hyper geometric, and Normal.

Unit III: Sampling Distributions and Estimation:

Sampling concepts. Sampling methods. Concept of sampling distribution, its expected value and standard error. Sampling distribution of means and Central Limit Theorem. Sampling distribution of proportions. Point and interval estimation.

Unit IV: Hypothesis Testing:

General methodology of hypothesis testing – Primary and Secondary hypothesis, techniques of hypothesis testing – Conclusion drawing and cross testing.

Unit V: Analysis of Variance:

F-test of equality of variances. Chi – square test for Independence, Rank correlation test.

Unit VI: Correlation and Regression Analysis:

Simple, multiple and partial correlation analysis. Rank correlation. Simple and Multiple linear regression analysis (involving up to three variables).

Session 2018-20 Onwards