

Programme Name	Master of Commerce
Semester	Second
Paper No	2.42
Course Code	
Course Name	Econometrics (Paper - 2 )
Course Type	Elective Course
Effective from	DECEMBER 2011
Objective	To present a clear, simple and systematic and comprehensive explosion of the methods, principles and techniques of statistics in various discipline with special reference to commerce, management and economics and business.

Unit No.	Topic No.	Content	Hrs	Marks W + %	Credit
1	01	Time Series Analysis Distinction between time series and cross - section data, Components of time series. Determination of trend by least square, iterated averages, weighted least square and variate difference method with necessary assumptions. Study of stationary time series, auto regressive series and periodogram and correlogram analysis.	15	25	01
2	02	Econometric Methods General linear model - basic assumptions, estimation of parameters and tests of significance and associated confidence intervals, Problem of prediction with two regressions and use of multiple correlation coefficient in problems of regression, Problem of multi-co-linearity and its diagnostic measures without derivation, Use of dummy variables without derivation. Durbin Waston test and its use in testing presence of auto correlation.	15	25	01
3	03	Analysis of variance and design of Experiments. Analysis of variance for one-way and two-way classification. Need for design of experiments. Fundamental principles of design of experiments. Lay out, construction, analysis. Advantages and disadvantages of basic design CRD, RBD and LSD. Missing plot techniques and estimate of one and two missing observation in case of RBD and LSD. (Results and numerical examples should be taken)	15	25	01
4	04	Efficiency of RBD over CRD and LSD over RBD. Factorial design. Confounding and advantages and disadvantages of confounding. Analysis of $2^2$ & $2^3$ designs by Yates' method, Balanced Incomplete Block Design, Efficiency of B.I.B.D relative to RBD.	15	25	01

**References :**

1. Allen R.G.D : Mathematical Economics
2. Allen R.G.D. : Mathematical Analysis for Economists
3. Henderson & Quandt : Micro Economic Theory
4. Cochran W.G. (1984) : Sampling Techniques (Wiley Eastern)
5. Murthy M.N. (1964) : Sampling theory and methods: Statistical Publishing Society Calcutta
6. Johnston J (1984) : Econometric Methods (3rd Edition ) McGraw Hill
7. Gujarati O. (1979) : Basic Econometrics, McGraw Hill
8. Jaiswal M.C.(1984) : Economic Statistics , (Gujarati) Granth Nirman Board
9. Mody R.J. : Mathematical Economics (Gujarati)
10. Gajjar A.V. & Patel S.S. : Statistics (Gujarati)
11. Goon, Gupta and Dasgupta (1984) : Fundamentals of Statistics Vol. II ( World Press)
12. Sudman S. (1976) : Applied Sampling Academic Press.

**Note :** One Question from each unit with internal options. 60 % for examples and 40 % for theory weightage compulsory for each question. And each question should contain two or three sub-questions.