Sankalchand Patel University

Faculty of Commerce

First Year Master of Commerce

In Effect from Academic Year 2021-22

COURSE CODE: 2CM2010214	**COURSE TITLE:** ECONOMETRICS – 2
SEMESTER-2, **COURSE TYPE :** SPECIALIZATION	

COURSE 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.

Teaching Scheme (Hours per week)		**Evaluation Scheme (Marks)**		
Lectures	Credit	University Assessment	Institutional Assessment	Total
4	4	60	40	100

Unit	**Topic and Contents**	**Hours**	**Wt. (%)**
1.	**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 e series and periodogram and correlogram analysis.	15	25%
2.	**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%
3.	**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.	15	25%
4.	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%

References Books :

1. Allen R.G.D : Mathematical Economics
2. Allen R.G.D. : Mathematical Analysis for Economists
3. Cocharn W.G. (1984) : Sampling Techniques (Wiley Eastern)
4. Gajjar A.V. & Patel S.S. : Statistics (Gujarati)
5. Goon, Gupta and Dasgupta (1984) : Fundamentals of Statistics Vol. II (World Press)

6. Gujarati O. (1979) : Basic Econometrics, McGraw Hill
7. Henderson & Quandt : Micro Economic Theory
8. Jaiswal M.C.(1984) : Economic Statistics , (Gujarati) Granth Nirman Board
9. Johnston J (1984) : Econometric Methods (3rd Edition) McGraw Hill
10. Mody R.J. : Mathematical Economics (Gujarati)
11. Murthy M.N. (1964) : Sampling theory and methods: Statistical Publishing Society Calcutta
12. Sudman S. (1976) : Applied Sampling Academic Press.