**Teacher Name: Ms. Anita**

**Paper Name: Introductory Econometrics**

**Class Type: B.A. (Hons) Economics, Fourth Semester (CBCS)**

**Paper Shared with: NONE**

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| **Unit to take** | **Month wise scheduled to be followed** | **Test/Assignment/Revision/Presentation etc** |
| **Unit 1****Nature and scope of Econometrics** **Gujarati: Ch 1** | **January** **3 Lectures** |  |
| **Unit 2** **Simple Linear Regression Model: Two Variable Case****Review of Statistics: normal distribution, chi-.****square, t- and F-distributions; tests for****comparing parameters from two samples. Other****topics can be discussed here as per the****discretion of the instructor, since the concepts****discussed here are applied in other topics.****Estimation of model by method of ordinary least****squares; Properties of estimators; Goodness of****fit; Testing of Hypotheses; Scaling and units of****measurement; Confidence intervals; Gauss****Markov Theorem; Forecasting****Review of Statistics :Devore: Ch 7: Sec 7.4, Ch 9.1,9.2, 9.5****Gujarati: Appendix D, pages 507-510****Two Variable Case: Gujarati: Ch 2, Ch 3****Dougherty: Ch2****(excluding “A Monte Carlo Experiment”, that is Sec 2.4** | **January** **17 Lectures** |  |
| **Unit 3** **Multiple Linear Regression Model****Estimation of parameters; Properties of OLS****estimators; Goodness of fit- R2 and Adjusted****R2; Partial regression coefficients;****Testing Hypotheses: Individual and Joint;****Functional Forms of Regression Models;****Qualitative (dummy) independent variables****Gujarati: Ch 4,****Ch 5,****Ch 6 (excluding Sec 6.7)****Dougherty: Ch3 (excluding Sec****3.4), Ch 5** | **February and March 4 weeks(I,II.III)** | **Test –I (Unit- 2 and 3)** |
| **Unit 4** **Violations of Classical Assumptions: Consequences,****Detection and Remedies****Multicollinearity;****Heteroscedasticity;****Auto-correlation****.****Gujarati: Ch 8,****Ch 9 (Excluding Sec 9.5),****Ch 10 (Excluding Sec 10.6,****Appendix 10A)****Dougherty: Ch 3 (only sec 3.4 is to done),****Ch 7: Goldfeld-Quandt test (p.****285-286 are to be done), Ch12 (pp 434-440 are to be done).** | **March and April 3 weeks** | **Test –II****( UNIT 4)** |
| **Unit 5** **Specification Analysis****Omission of a relevant variable;****Inclusion of irrelevant variable;****Tests of specification****Gujarati: Ch 7****Dougherty: Ch 6: Sec 6.1, 6.2, 6.3, 6.5** | **April 2 weeks** | **Test- III(Unit- 4,5 )** |

**Readings:**

**1. D. N. Gujarati and D.C.Porter, Essentials of Econometrics, 4th Edition, McGraw**

**Hill International Edition, 2010.**

**2. Christopher Dougherty, Introduction to Econometrics, 4th edition, OUP, Indian**

**edition, 2011.**

**3. Jeffrey M. Wooldridge, Introduction to Econometrics: A Modern Approach, 5th**

**Edition, Cengage Learning, 2014.**

**4. Damodar Gujarati, Econometrics by Example, 2nd edition, Palgrave Macmillan,**

**2014.**

**5. Maddala, G.S and Kajal Lahiri, Introduction to Econometrics, 4th edition, Wiley**

**publication, 2009. This book is particularly useful for the discussion on the LM**

**and Durbin’s h tests for testing for autocorrelation.**

**6. Jan Kmenta, Elements of Econometrics, Indian Reprint, Khosla Publishing House,**

**2008.**

**7. Jay L. Devore, Probability and Statistics for Engineers, Cengage Learning, 2010.References**

**Assessment:**

**This course carries 100 marks of which the end semester examination is 75 marks and internal assessment is worth 25 marks as per the following norms: .**