Name of the Teacher: Dr. Rituraj Baruah

Semester: ODD & EVEN

| Class/Semester | Title & Code of the Paper Allotted (Credit) | Method of Teaching | Teaching Material | Unit | Topic | Period/ Hours Required | Details of the Contents | Remarks / Books |
|----------------|--|-----------------------------------|----------------------|-----------------|--|------------------------------|--|--|
| SemII(Even) | Introductory Probability (2Cr.) | Lecture, Board, Assignments | Text Book | IV | Mathematical Expectation | 30 | Moment/mgf/cgf/condit ional expectation | Probability and Statistical Inference by Hogg, R.V., Tanis, E.A., Rao,J.M |
| Sem IV (Even) | Statistics for mathematics STSMJ- 042(4Cr.) | Lecture & Board work | Text Book | I,II,II I,IV | Differential Equation/Alge bra of matrices/Deter minants | 60 | Exact differential Equation/Adjoint and Inverse of a matrix/Characteristic roots and equations | Zafar Ahsan: Differential Equations and their applications |
| Sem VI | STSMJ-061 (4Cr) | Lecture, Board, Assignments | Text Book | I/II/ III | Linear Model and Regression Analysis | 60 | Simple linear regression, Multiple linear regression, BLUE, hypothesis testing, model diagnostic checking | Introduction to Linear Regression Analysis by Douglas Montgomery/ Elizabeth A.Peck/G, G.Vining |
| Sem I (Odd) | STSMJ-011 (2Cr.) | Lecture, Board, Assignments | Text Book | III | Correlation and Regression | 30 | Scatter Diagram, Karl Pearson correlation coefficient, lines of regression | Fundamental of mathematical Statistics by |

| | | | | | | | | S.C. Gupta and V.K. Kapoor |
|---------------|---------------------|-----------------------------------|-----------|-----------------|---|----|--|---|
| Sem I (Odd) | STSMI-011 (2Cr.) | Lecture, Board, Assignments | Text Book | III | Correlation and Regression | 30 | Scatter Diagram, Karl Pearson correlation coefficient, lines of regression | Fundamental of mathematical Statistics by S.C. Gupta and V.K. Kapoor |
| Sem III (Odd) | STSMJ-031 (4Cr.) | Lecture & Discussion | Text book | I,II,II I,IV | Differential Calculus, Integral Calculus, Theory of equation, Review of limit | 60 | Limit/Partial differentiation/Leibnitz rule/Eular theorem/Definite integral/Gamma Funtion/Theory of equation/span of a set/review of limit/Taylor and Maclaurin's series | Gorakh Prasad: Differential Calculus, Integral Calculus,Pothi shala Pvt Ltd, Allahbad |
| Sem V (Odd) | STSMJ-051 (4Cr.) | Lecture, Board, Assignments | Text book | I,II,II I,IV | Econometrics | 60 | Econometric Models/Heteroscadastic ity/Multicollinearity/ Autocorrelation | Basic Econometrics by Damodar & Gujrati |