22 1.22222 STUTE OF TECHNOLOGY National Institute of Technology, Silchar-10 Phone: (03842) 224879 Fax: (03842)224797 Department of Mathematics (An Institution of National Importance) Assam-788010 Website: http://www.nits.ac.in EPABX 233841-5129 Notice Date: 26.11.2024 This is to inform all the concerned that the syllabus of the End-Sem exam for MA201 which will be held on Monday 2nd December 2024 is as follows: Fourier Transforms: Introduction, Fourier series (F.S.), Even and Odd functions, Half range expansions. Fourier Integral (F.I.), Fourier Sine & Cosine transforms, Fourier Transforms (F.T.) Formation of PDE, Linear PDE of first order Lagrange's method. Non-linear PDE of first order Charpit's method. Homogenous and Non-homogeneous linear equations with constant coefficients. Boundary and Initial value problems: (Dirichlet and Neumann type), Method of separation of variables for PDEs, Wave Equation: One-dimensional, Cartesian Coordinates. Probability & Statistics: Introduction, Random Variable. Cumulative distribution function. Probability Mass and Density function. Binomial Distribution Poisson Distribution. Normal Distribution. Curve fitting: Fitting

of Straight line and Parabola (by the method of Least Squares). Correlation and Coefficient of Correlation. Regression and Coefficient of Regression, Lines of Regression. Angle between Regression Lines. Pankaj Biswas Assistant Professor Department of Mathematics NIT Silchar-768010, Assam Course Coordinator Mathematics III(MA201)