

ENGINEERING MATHEMATICS TEST SERIES					
GATE 2019 SCHEDULE: ELECTRICAL ENGINEERING					
Test Date	Test Type	Syllabus [EM- Engineering Mathematics]	No. of Question	Marks	Duration
30/07/2018	EM: Minor Test- 1	LINEAR ALGEBRA: Matrix Algebra, Systems of linear equations, Eigenvalues, Eigenvectors. TRANSFORM THEORY: Fourier Transform, Laplace Transform, z-Transform.	33	50	90 min
30/08/2018	EM: Minor Test- 2	CALCULUS: Mean value theorems, Theorems of integral calculus, Evaluation of definite and improper integrals, Partial Derivatives, Maxima and minima, Multiple integrals, Fourier series, Vector identities, Directional derivatives, Line integral, Surface integral, Volume integral, Stokes's theorem, Gauss's theorem, Green's theorem.	33	50	90 min
29/09/2018	EM: Minor Test- 3	DIFFERENTIAL EQUATIONS: First order equations (linear and nonlinear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's equation, Euler's equation, Initial and boundary value problems, Partial Differential Equations, Method of separation of variables.	33	50	90 min
30/10/2018	EM: Minor Test- 4	COMPLEX VARIABLES: Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, Taylor series, Laurent series, Residue theorem, Solution integrals. NUMERICAL METHODS: Solutions of nonlinear algebraic equations, Single and Multi-step methods for differential equations.	33	50	90 min
30/11/2018	EM: Minor Test- 5	PROBABILITY AND STATISTICS: Sampling theorems, Conditional probability, Mean, Median, Mode, Standard Deviation, Random variables, Discrete and Continuous distributions, Poisson distribution, Normal distribution, Binomial distribution, Correlation analysis, Regression analysis.	33	50	90 min