

LESSON PLAN

Subject Code & Name: 16BS1002, ENGINEERING MATHEMATICS – II

Branch/Semester/Session: ECE-C, II Sem

Faculty Name: Dr.R.Santhi Kumar

Year: Ist

A.Y: 2017-18

| Period | Date (Tentative) | Topic | Unit No | Teaching Methodology | Remarks | Corrective Action (Upon Review) |
|--------|---------------------|--|------------|-------------------------|---------|--|
| 1 | 10-1-2018 | Introduction (Numerical solutions of Equations and Interpolation) | I | CR | | |
| 2 | 11-1-2018 | Solution of Algebraic and Transcendental Equations: The Bisection Method | I | CR | | |
| 3 | 12-1-2018 | The Method of False Position | I | CR | | |
| 4 | 13-1-2018 | Newton-Raphson Method. | I | CR | | |
| 5 | 18-1-2018 | Problem solving | I | CR | | |
| 6 | 19-1-2018 | Interpolation: Introduction – Finite differences-Forward Differences | I | CR | | |
| 7 | 20-1-2018 | Backward differences –Central differences – Symbolic relations and separation of symbols | I | CR | | |
| 8 | 23-1-2018 | Problem solving | I | CR | | |
| 9 | 23-1-2018 | Newton's formulae for interpolation(forward & backward) | I | CR | | |
| 10 | 25-1-2018 | Problem solving | I | CR | | |
| 11 | 27-1-2018 | Problem solving | I | CR | | |
| 12 | 30-1-2018 | Interpolation with unevenly spaced points – Lagrange's Interpolation formula. | I | CR | | |
| 13 | 30-1-2018 | Problem solving | I | CR | | |
| 14 | 1-2-2018 | Numerical Differentiation using finite differences – Trapezoidal rule | I | CR | | |
| 15 | 2-2-2018 | Simpson's 1/3 Rule | I | CR | | |
| 16 | 3-2-2018 | Problem solving | II | CR | | |
| 17 | 5-2-2018 | Simpson's 3/8 Rule. | II | CR | | |
| 18 | 6-2-2018 | Problem solving | II | CR | | |
| 19 | 8-2-2018 | Solution of Ordinary Differential equations - Solution by Taylor's series | II | CR | | |
| 20 | 9-2-2018 | Problem solving | II | CR | | |
| 21 | 15-2-2018 | Picard's Method of successive Approximations | II | CR | | |
| 22 | 16-2-2018 | Problem solving | II | CR | | |
| 23 | 17-2-2018 | Euler's Method & Modified Euler's Method | II | CR | | |
| 24 | 19-2-2018 | Problem solving | II | CR | | |
| 25 | 19-2-2018 | Runge – Kutta Methods | II | CR | | |
| 26 | 22-2-2018 | Predictor – Corrector Methods – Milne's Method | II | CR | | |
| 27 | 23-2-2018 | Problem solving | II | CR | | |
| 28 | 24-2-2018 | Laplace transforms of standard functions | III | CR | | |
| 29 | 27-2-2018 | Laplace transforms of functions using Shifting Theorems | III | CR | | |
| 30 | 27-2-2018 | Problem solving | III | CR | | |
| 31 | 1-3-2018 | Laplace transforms of derivatives and integrals | III | CR | | |
| 32 | 2-3-2018 | Problem solving | III | CR | | |
| 33 | 3-3-2018 | Laplace transforms of Unit step function, Dirac's delta function | III | CR | | |

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|----|-----------|--|-----|----|--|--|
| 34 | 5-3-2018 | Inverse Laplace transforms of standard functions | III | CR | | |
| 35 | 5-3-2018 | Problem solving | III | CR | | |
| 36 | 12-3-2018 | Inverse Laplace transforms of functions using Shifting Theorems | III | CR | | |
| 37 | 12-3-2018 | Problem solving | III | CR | | |
| 38 | 15-3-2018 | Inverse Laplace transforms using Convolution theorem | III | CR | | |
| 39 | 16-3-2018 | Problem solving | III | CR | | |
| 40 | 17-3-2018 | Solution of ordinary differential equations using Laplace transforms. | III | CR | | |
| 41 | 19-3-2018 | Problem solving | III | CR | | |
| 42 | 19-3-2018 | Determination of Fourier coefficients (without proof) – Fourier series expansion of standard functions | IV | CR | | |
| 43 | 22-3-2018 | Problem solving | IV | CR | | |
| 44 | 23-3-2018 | Fourier series expansion of even and odd functions | IV | CR | | |
| 45 | 24-3-2018 | Problem solving | IV | CR | | |
| 46 | 26-3-2018 | Fourier series expansion in an arbitrary interval | IV | CR | | |
| 47 | 26-3-2018 | Problem solving | IV | CR | | |
| 48 | 29-3-2018 | Half-range Fourier sine and cosine series expansion | IV | CR | | |
| 49 | 30-3-2018 | Problem solving | IV | CR | | |
| 50 | 31-3-2018 | Formation of partial differential equations by elimination of arbitrary constants and arbitrary functions | V | CR | | |
| 51 | 2-4-2018 | Problem solving | V | CR | | |
| 52 | 2-4-2018 | solutions of first order linear partial differential equation | V | CR | | |
| 53 | 6-4-2018 | Problem solving | V | CR | | |
| 54 | 7-4-2018 | solutions of first order non-linear (standard type-I) equations | V | CR | | |
| 55 | 10-4-2018 | solutions of first order non-linear (standard type-II) equations | V | CR | | |
| 56 | 12-4-2018 | solutions of first order non-linear (standard type III) equations | V | CR | | |
| 57 | 13-4-2018 | solutions of first order non-linear (standard type IV) equations | V | CR | | |
| 58 | 16-4-2018 | Solution of linear Partial differential equations with constant coefficients – Method of Separation of Variables | V | CR | | |
| 59 | 16-4-2018 | One dimensional Wave equations. | V | CR | | |
| 60 | 18-4-2018 | Problem solving | V | CR | | |
| 61 | 19-4-2018 | One dimensional Heat equations. | V | CR | | |
| 62 | 20-4-2018 | Tutorial classes | V | CR | | |
| 63 | 21-4-2018 | Tutorial classes | V | CR | | |
| 64 | 24-4-2018 | Tutorial classes | V | CR | | |
| 65 | 24-4-2018 | Tutorial classes | V | CR | | |
| 66 | 26-4-2018 | Tutorial classes | V | CR | | |
| 67 | 27-4-2018 | Tutorial classes | V | CR | | |
| 68 | 28-4-2018 | Tutorial classes | V | CR | | |