**Lesson Plan**

Name of the Faculty : Er. Sapna VF

Discipline : CSE

Semester: 4th Semester

Subject :Mathematics III

Lesson Plan Duration : 15 weeks

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| Week | Theory | | |
| Lecture | Topic | |
| 1 | 1 | Fourier series:EulersFormulae | |
| 2 | Conditions for Fourier expansions, Fourier expansion of functions having points of discontinuity | |
| 3 | Change of interval | |
| 2 | 4 | Odd and even functions | |
| 5 | Fouriercosine and sinehalfrangeseries | |
| 6 | Problems of fourier series |
| 3 | 7 | Fourier integral | |
| 8 | Fourier transform | |
| 9 | Fourier transform and propertied | |
| 4 | 10 | Parseval identity | |
| 11 | Convoltion | |
| 12 | RelationbetweenFourierandLaplacetransforms,Fouriertransformsofthederivativesofafunction | |
| 5 | 13 | Application to boundary value problem | |
| 14 | Problem of fourier transforms | |
| 15 | Function of complex variable, exponential, trigonometry | |
| 6 | 16 | Hyperbolic logarithmic | |
| 17 | Limit and continuity | |
| 18 | Differentiabilityandanalyticity. | |
| 7 | 19 | C-R equation, Necessaryandsufficientconditionsforafunctiontobeanalytic | |
| 20 | PolarformoftheCauchy-Riemannequations | |
| 21 | Harmonicfunctions,Applicationtoflowproblems | |
| 8 | 22 | Conformaltransformation | |
| 23 | Standard transformation | |
| 24 | Problems of complex function | |
| 9 | 25 | Basic concepts of ProbabilityDistributions | |
| 26 | Baye's theorem | |
| 27 | Discrete&Continuousprobabilitydistributions | |
| 10 | 28 | Momentgeneratingfunction,Probabilitygeneratingfunction | |
| 29 | PropertiesandapplicationsofBinomial | |
| 30 | Poisson distribution | |
| 11 | 31 | Normal distribution | |
| 32 | Problems of probability | |
| 33 | LinearProgramming:Linearprogrammingproblemsformulation | |
| 12 | 34 | SolutionofLinearProgrammingProblemusingGraphicalmethod | |
| 35 | Using graphical method | |
| 36 | Simplex method | |
| 13 | 37 | Simplex method | |
| 38 | Dual simplex method | |
| 39 | Dual simplex method | |
| 14 | 40 | Problems of LPP | |
| 41 | Revision | |
| 42 | Revision | |
| 15 | 43 | Revision | |
| 44 | Revision | |
| 45 | Revision | |