**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 |