

Course Objectives: To learn

1. Perform Fourier series for a given range.
2. Perform Fourier sine and cosine transformations.
3. Understand the one dimensional wave equation, heat equation.
4. Understand fundamental concepts of probability theory and random variables.
5. Analyze statistical data using sampling distributions.

1. Obtain the Fourier series for a given function.
2. Obtain the Fourier sine and cosine transformations.
3. Determine the solution of a wave and heat equations by the method of separation of variables.
4. Evaluate statistical parameters of discrete and continuous probability distributions.
5. Testing of hypothesis of few unknown statistical parameters using types of sampling, Sampling distribution of means.

Unit-II: Fourier Transforms: - Fourier transformation - sine, cosine transformations
- simple illustrations.

Unit-IV: Probability: Review of fundamental concepts of probability, Discrete and continuous distributions, Poisson, and Normal distributions.

mailed
12/27/26

S. A. M. Zwan Kuy
Play

Agim

Dr. K. PHANEENDRA
Professor
Department of Mathematics
Osmania University
Hyderabad-500 007

Text Books:

1. B. S. Grewal, Higher Engineering Mathematics, Khanna Publication 43rd Edition, 2014.
2. R. K .Jain, S.R.K Iyengar, Advanced Engineering Mathematics, Narosa Publication. 4Th Edition, 2014.
3. M.D.Rai Singhanian, Ordinary and Partial Differential Equations, S.Chand and Co., 2024, 20th Edition.

maheed
25/7/26

Sd. A.L.L

From
Kuf

Agid

Off Day

Kphaneendra

Dr. K. PHANEENDRA
Professor
Department of Mathematics
Osmania University
Hyderabad-500 007.

