Lesson Plan

Name of the Faculty   :   Ms. Nidhi

Discipline   :   EEE

Semester   :   IV

Subject   :   Mathematics-III   (BSC-MATH -204G)

Lesson Plan Duration   : (from Jan., 2020 to April , 2020)

** Work Load (Lecture) per week (in hours): Lectures-02

Week	Theory	
	Lecture Day	Topic (including assignment/test)
1st (04/01/20) To (11/01/20)	1st	Solution of polynomial and transcendental equations – Bisection method
	2nd	Newton-Raphson method and Regula-Falsi method
2nd (12/01/20) To (19/01/20)	1st	Finite differences, Interpolation using Newton's forward and backward difference formulae
	2nd	Newton's divided difference and Lagrange's formulae
3rd (20/01/20) To (27/01/20)	1st	Numerical integration, Trapezoidal rule
	2nd	Simpson's 1/3rd and 3/8 rules **Assignment-1**
4th (28/01/20) To (03/02/20)	1st	Taylor's series
	2nd	Runge-Kutta method of fourth order for solving first and second order ordinary differential equations

Week	Lecture	Topic
5th (04/02/20) To (11/02/20)	1st	Finite difference solution of two dimensional Laplace equation
	2nd	Poission equation
6th (12/02/20) To (19/02/20)	1st	Implicit and explicit methods for one dimensional heat equation (Bender-Schmidt and Crank-Nicholson methods),
	2nd	Finite difference explicit method for wave equation
7th (20/02/20) To (27/02/20)	1st	Probability spaces, Conditional probability **Assignment-2**
	2nd	Bayes' theorem
8th (28/02/20) To (06/03/20)	1st	Discrete random variables, Bernoulli distribution
	2nd	Binomial distribution
9th (07/03/20) To (14/03/20)	1st	Poisson distribution, Poisson approximation to the Binomial distribution **Assignment-3**
	2nd	Expectation of discrete random variables, Moments
10th (15/03/20) To (22/03/20	1st	Variance of a sum
	2nd	Correlation coefficient, Continuous random variables and their properties
11th (23/03/20) To (30/03/20)	1st	Distribution functions and Densities
	2nd	Normal, Exponential and Gamma densities

12th (31/03/20) To (06/04/20)	1st	Measures of central tendency, Moments **Assignment-4**
	2nd	Skewness and Kurtosis
13th (07/04/20) To (14/04/20)	1st	Testing of hypothesis, Test of significance
	2nd	Large sample test for single proportion, Difference of proportions
14th (15/04/20) To (22/04/20	1st	Difference of proportions, Tests for single mean
	2nd	Difference of means and Difference of standard deviations
15th (23/04/20) To (30/04/20)	1st	Test for ratio of variances, Chi-square test for goodness of fit and Independence of attributes
	2nd	**Assignment-5**
16th (01/05/20) To (04/05/20)	1st	REVISION OF SYLLABUS
	2nd	REVISION OF SYLLABUS