Course outcomes of Operation Research (Paper code: - CE 605A (CE), CS 605A (CSE))

1. To understand and to apply the formulation and Solution of Linear Programming Problem by Graphical and Simplex Method

2. Methods of solving Transportation Problems and Assignment Problems.

3. To develop the network and to find the shortest path, critical path using PERT and CPM method, maximal flow of Network analysis by Floyd's Algorithm and Fulkerson's Algorithm.

4. Understanding of EOQ Models of Deterministic and Probabilistic ; Safety Stock; Buffer Stock and problems related to these.

5. Solve Simple Games using various techniques, use of mixed strategies , dominance, and graphical methods to find the value of game.

6. To develop the modelling and mathematical skills to analytically determine queuing models and finding various parameters associated with the model and applications of some real life situations.

Course Outcomes of Mathematics – I (ARCH 102)

1. Understand the different types of matrices, concept of rank, methods of matrix inversion and their applications.

2. Apply the concept and techniques of application of differential calculus to determine tangent and normal, curvature, envelope, asymptotes of any curve and evaluation of different types of problems of calculus.

3. Learn and apply the concept of differentiation and evaluation of different types of problems of differentiation.

Course Outcomes of Mathematics – II (ARCH 201)

1. Understand different techniques to solve first and second order ordinary differential equations with its formulation to address the modelling of systems

2. Apply statistical tools for analysing data samples and drawing inference on a given data set.

3. To formulate and apply LPP and solution of LPP by Graphical Method and Simplex Method.

4. Learn and apply the concept of geometrical two dimensions and three dimensions and evaluation of different types of problems of geometrical shapes.

Course Outcomes of Mathematics – I A BS-M101 (CSE 1st Year)

1. Apply the concept and techniques of differential and integral calculus to determine curvature and evaluation of different types of improper integrals.

2. Understand the domain of applications of mean value theorems to engineering problems.

3. Learn different types of matrices, concept of rank, methods of matrix inversion and their applications.

4. Understand linear spaces, its basis and dimension with corresponding applications in the field of computer science.

5. Learn and apply the concept of eigen values, eigen vectors, diagonalisation of matrices and orthogonalization in inner product spaces for understanding physical and engineering problem

Course Outcomes of Mathematics –I B, BS-M102 (CE/EE/ ME)

1. Apply the concept and techniques of differential and integral calculus to determine curvature and evaluation of different types of improper integrals.

2. Understand the domain of applications of mean value theorems to engineering problems.

3. Learn the tools of power series and Fourier series to analyze engineering problems and apply the concept of convergence of infinite series in many approximation techniques in engineering disciplines.

4. Apply the knowledge for addressing the real life problems which comprises of several variables or attributes and identify extremum points of different surfaces of higher dimensions.

Course Outcomes of Mathematics –I IA, BS-M201 (CSE)

1. Learn the ideas of probability and random variables, various discrete and continuous probability distributions with their properties and their applications in physical and engineering environment.

2. Understand the basic ideas of statistics with different characterisation of a univariate and bivariate data set.

3. Apply statistical tools for analysing data samples and drawing inference on a given data set.

Course Outcomes of Mathematics –II B, BS-M202 (CE/EE/ ME)

1. Learn the methods for evaluating multiple integrals and their applications to different physical problems.

2. Understand different techniques to solve first and second order ordinary differential equations with its formulation to address the modelling of systems and problems of engineering sciences.

3. Learn different tools of differentiation and integration of functions of a complex variable that are used with various other techniques for solving engineering problems.

4. Apply different types of transformations between two 2- dimensional planes for analysis of physical or engineering problems.

Course outcomes of Discrete Mathematics (CS 503)

1. Explain and apply basic notions of symbolic logic, connectives, truth tables, equivalence of propositional formulae by truth tables and using properties, finding CNF and DNF

2. Checking validity of arguments and Quantification.

3. Understanding the law of Mathematical Induction, Division Algorithm, and Greatest Common Divisor (GCD) and calculation of GCD by Division algorithm.

4. Understand the definitions of congruences, residue classes and least residues, congruence equations and application of congruences.

5. Understand Poset and Lattice and the relation between them.

6. Understand and Implementation of Counting Techniques and Graph Colouring and Matching.

Course Outcomes of Engineering Mathematics-III (M 302(ECE), M 402 (ME, CE))

1. Understand and to find Fourier series, Fourier Transform of different forms and application of properties.

2. To identify the analytic function and evaluate the line integrals of a complex valued function.

3. Understand the axioms of probability, conditional probability and independent events and Random variables and the Distribution functions.

4. To apply a range of techniques to find solution of Partial Differential Equation and series solution of ODE

5. To find solutions of Legendre equation and Bessel's equation and some properties.

Course Outcomes of Engineering Mathematics-III (M (401) CSE)

1. Understand of Axioms of Probability, Conditional probability and Independent Events, Random Variables and their distributions.

2. To understand and apply basic statistic and sampling.

3. Understand of Test Statistic and testing of hypothesis.

4. To understand binary composition and various algebraic structures Group, Ring, Field.

5. Understand of Planar Graph and Graph Colouring and determination of Chromatic polynomials

Course Outcomes of Numerical Methods (M(CS)301 (ECE), M(CS)401 (CSE, ME, CE))

1. Different kind of operators and apply various interpolation methods and finite difference concepts.

2. Work out numerical differentiation and integration whenever and wherever routine methods are not applicable.

3. Apply numerical methods to find solution of algebraic and transcendental equations using different methods under different conditions, and numerical solution of system of algebraic equations.

4. Apply numerical methods to find solutions of ordinary differential equations using different methods.

Course outcomes of Operations Research (Paper Code: - ME 705C (ME))

1. Set up decision models and use some solution methods for finding solutions of problems.

2. To formulate and apply LPP and solution of LPP by Graphical Method and Simplex Method.

3. Methods of solving Transportation Problems and Assignment Problems.

4. To develop the network and to find the shortest path, critical path using PERT and CPM method, maximal flow of Network analysis by Floyd's Algorithm and Fulkerson's Algorithm

5. To develop the modelling and mathematical skills to analytically determine queuing models and finding various parameters associated with the model and applications of some real life situations.

6. Introduction to Non Linear Optimization and some methods of solving NLPP.