Lesson Plan 2022-23 (Even semester)

Name- Meenakshi
Class- B.A. 2nd sem

Department - Mathematics
Subject- Ordinary diffential Equations and Laplace Transforms
Subject Code- BAMH-104

S. No.	Week	Name of Topic
1	1st week 13-18 February	Geometrical Meaning of a Differential Equation, Exact diff. equation, Integrating Factors.
2	2nd week 20-25 February	Integrating Factors continue, First order higher degree equation solvable for x ,y and p.
3	3rd week 27-04 March	Lagrange's eq., Clairat eq., Eq. reducible to clairat's eq., singular solution.
4	4th week 13-18 March	Orthogonal Trajectories in cartesian co-ordinate and polar co-ordinate, self orthogonal families of curve
5	5th week 20-25 March	Linear differential equation with constant co-efficient.
6	6th week 27-01 April	Homogeneous ordinary linear differential eq., Eq. reducible to homogeneous.
	7th week 03-08 April	Linear differential equation of second order.
7	8th week 10-15 April	Reduction to normal form, Transformation of the eq. by changing the dependent/independent variable, Methods of variation of parameter.
8	9th week 17-22 April	Laplace transforms, Linear property, shifting theorem, Laplace transform of derivative and integration, Differentiation and integration of laplace, Convolution Theorem
9	10th week 24-29 April	Inverse Laplace transform, Inverse laplace transform of derivative
10	11th week 01-06 May	Solution of diff. eq. by laplace transform
11	12th week 08-12 May	Revision

Meenakshi
14/02/2023.

Lesson Plan 2022-23 (Even semester)

Name- Meenakshi

Class- B.A. 2nd sem

Department - Mathematics

Subject- Vector Calculus and Geometry

Subject Code- BAMH-105

S. No.	Week	Name of Topic
1	1st week 13-18 February	Scaler and vector product of three vectors, Product of four vectors, Reciprocal vectors
2	2nd week 20-25 February	Vector differentiation, Scaler valued point functions, vector valued point functions, derivative along a curve, directional derivative, Gradient of a scaler point functions.
3	3rd week 27- 04 March	Geometrical interpretation of grad(ϕ), Divergance and curl of vector point functions, Gradient, Divergance and curl of sums & product and their related vector identities, Laplacian Operator.
4	4th week 13-18 March	Vector integation, indefinite integation, definite integation, standard results of integration, Line integral, surface integral, Volume integral.
5	5th week 20-25 March	Gauss divergance theorem, Green theorem, Stoke theorem.
6	6th week 27-01 April	General eq. of second degree, Tracing of conics, system of conics, confocal conics.
7	7th week 03-08 April	Tangent at any point to the conic, chord of contact, pole of line to the conic, Director circle of conic, Polar eq. of a conic, Tangent and normal to the conic.
8	8th week 10-15 April	Sphere, sphere through a given circle, Intersection of two spheres, vertical plane of two spheres, co-axial system of spheres.
9	9th week 17- 22 April	Cones, enveloping cones, reciprocal cones.
10	10th week 24- 29 April	cylinder, enveloping cylinder
11	11th week 01-06 May	Revision
12	12th week 08-12 May	Revision

Meenakshi

14/02/2023

Govt. College Balsamand (Hisar)

Lesson Plan 2022-23

Name of Asst. Prof.- Meenakshi

Dept. Mathematics

Class- B.A 1st

Subject- Mathematical Lab-II

Semester- 2nd

Paper Code- BAMH (P)-106

Week	Topic
1st week 14-18 Feb	Introduction to Functions, Advantage of Functions, Function Definition and Body, Nesting of Functions
2nd week 20-25 Feb	Arrays, One dimensional Array, two dimensional arrays, Multi Dimensional Arrays
3rd week 27 Feb-4 March	Passing arrays to functions, String, Standard string handling functions, arithmetic operations on characters
4th week 13-18 March	Pointer and Arrays, Structures, Arrays and structure
5th week 20-25 March	Program to add two matrices, Program to find transpose of a matrix.
6th week 27 March- 01 Apr	Program to multiply two matrices Program to find the inverse of a matrix.
7th week 03 -08 Apr	Program to find the san of a series. Trigonometric series: sin(x), cos(x), tan(x), etc.
8th week 10 -15 Apr	Program to sort an entire array using bobble short
9th week 17 -22 Apr	Program to find trace of 3X3 Matrix, Program to find largest of three numbers using function.
10th week 24-29 Apr	Program to find factorial of a number using recursion
11th week 01-06 May	Program to generate n Fibonacci terms using recursion,
12th week 08-12 May	Program to count number of vowels and consonants in a given sentence
18th week 29-30 Apr	Program to print a salary chart for employer of a company

Meenakshi