

**PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY
PANIPAT**

Department of Computer Science & Engineering

LESSON PLAN

Name: - Ms. Tamanna Sethi

Subject Name: - Mathematics-III

Branch/Semester: - 3rd SEM

Subject Code:-BS-205 A

S.No.	Lecture No.	Topics to be covered	Planned on
1.	L-1	Introduction of fourier series, Fourier-Euler Formula.	31/08/2021
2.	L-2	Conditions for fourier expansion, fourier expansion for discontinuous function.	01/09/2021
3.	L-3	Conditions for fourier expansion, fourier expansion for discontinuous function.	02/09/2021
4.	L-4	fourier series of arbitrary interval.	03/09/2021
5.	L-5	fourier series of arbitrary interval.	06/09/21
6.	L-6	Fourier series for even and odd functions.	07/09/21
7.	L-7	Half range sine and cosine series.	08/09/21
8.	L-8	Practice of fourier series	09/09/21
9.	L-9	Fundamentals of sequence & series.	10/09/21
10.	L-10	Sequence and series	13/09/21
11.	L-11	Convergence and divergence of series	14/09/21
12.	L-12	Comparison test for convergence of series.	15/09/21
13.	L-13	Comparison test for convergence of series.	16/09/21
14.	L-14	D'Alembert's Ratio test	17/09/21
15.	L-15	D'Alembert's Ratio test	20/09/21
16.	L-16	Cauchy root test.	21/9/21

17.	L-17	Logarithmic test.	22/9/21
18.	L-18	Raabe's test.	23/9/21
19.	L-19	Practice questions	24/9/21
20.	L-20	First order ordinary differential equations.	27/9/21
21.	L-21	linear and Bernoulli's equations.	28/9/21
22.	L-22	linear and Bernoulli's equations.	29/9/21
23.	L-23	Exact differential equations	30/9/21
24.	L-24	Exact differential equations	1/10/21
25.	L-25	Euler's equations.	4/10/21
26.	L-26	Equations not of first degree: equations solvable for p.	5/10/21
27.	L-27	equations solvable for y.	6/10/21
28.	L-28	equations solvable for x and Clairaut's type.	7/10/21
29.	L-29	Second order linear differential equations with constant coefficients.	8/10/21
30.	L-30	Complementary function & particular integral of linear ODE with constant coeff.	11/10/21
31.	L-31	Complementary function & particular integral of linear ODE with constant coeff.	12/10/21
32.	L-32	Method of variation of parameters.	13/10/21
33.	L-33	Cauchy and Legendre's linear differential equations.	14/10/21
34.	L-34	Practice questions	15/10/21
35.	L-35	Multiple Integration.	18/10/21
36.	L-36	Double integrals (Cartesian)	21/10/21

37.	L-37	change of order of integration in double integrals.	22/10/21
38.	L-38	Change of variables (Cartesian to polar).	25/10/21
39.	L-39	Application of double integral in areas.	26/10/21
40.	L-40	Application of double integral in volumes.	27/10/21
41.	L-41	orthogonal curvilinear coordinates.	28/10/21
42.	L-42	orthogonal curvilinear coordinates.	29/10/21
43.	L-43	Simple applications involving cubes & spheres.	8/11/21
44.	L-44	Simple applications involving cubes & spheres.	9/11/21
45.	L-45	applications involving rectangular parallelepipeds.	10/11/21
46.	L-46	Practice questions	11/11/21
47.	L-47	Introduction of vectors, Scalar and Vector point functions.	12/11/21
48.	L-48	Gradient with its properties.	15/11/21
49.	L-49	Directional derivative.	16/11/21
50.	L-50	Divergence with its properties.	17/11/21
51.	L-51	Divergence with its properties.	18/11/21
52.		Curl with its properties.	22/11/21
53.		Line integrals,	23/11/21
54.		surface integrals.	25/11/21
55.		volume integrals.	26/11/21
56.		Green theorem	29/11/21

57.		Stokes theorem.	30/11/21
58.		Gauss Divergence theorem	01/12/21
59.		Practice questions	02/12/21
60.		Revision of syllabus	03/12/21
61.		Revision of syllabus	06/12/21
62.		Revision of syllabus	8/12/21
63.		Revision of syllabus	9/12/21
64.		Revision of syllabus	10/12/21
65.		Revision of syllabus	13/12/21
66.		Revision of syllabus	14/12/21
67.		Revision of syllabus	15/12/21
68.		Revision of syllabus	16/12/21