

**PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY
PANIPAT**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
COURSE PLAN**

Name: - Dr. Rachna Khurana

Subject Name: - Mathematics - III

Branch/Semester: - CSE / 3rd Sem.

Subject Code:- BS-205

Sr. No.	Lecture No.	Topics To Be Covered	Planned on	Covered On	Remarks
1	L 1	Introduction of fourier series, Fourier-Euler Formula.	17/7/2019		
2	L 2	Conditions for fourier expansion, fourier expansion for discontinuous function.	18/7/2019		
3	L 3	Conditions for fourier expansion, fourier expansion for discontinuous function.	19/7/2019		
4	L 4	fourier series of arbitrary interval.	22/7/2019		
5	L 5	fourier series of arbitrary interval.	24/7/2019		
6	L 6	Fourier series for even and odd functions.	25/7/2019		
7	L 7	Half range sine and cosine series.	26/7/2019		
8	L 8	Practice of fourier series	29/7/2019		
9	L 9	Fundamentals of sequence & series.	31/7/2019		
10	L 10	Sequence and series	1/8/2019		
11	L 11	Convergence and divergence of series	2/8/2019		
12	L 12	Comparison test for convergence of series.	5/8/2019		
13	L 13	Comparison test for convergence of series.	7/8/2019		
14	L 14	D'Alembert's Ratio test	8/8/2019		
15	L 15	D'Alembert's Ratio test	9/8/2019		
16	L 16	Cauchy root test.	12/8/2019		
17	L 17	Logarithmic test.	14/8/2019		
18	L 18	Raabe's test.	16/8/2019		
19	L 19	Practice questions	19/8/2019		
20	L 20	First order ordinary differential	21/8/2019		

		equations.			
21	L 21	linear and Bernoulli's equations.	22/8/2019		
22	L 22	linear and Bernoulli's equations.	23/8/2019		
23	L 23	Exact differential equations	26/8/2019		
24	L 24	Exact differential equations	28/8/2019		
25	L 25	Euler's equations.	29/8/2019		
26	L 26	Equations not of first degree: equations solvable for p.	30/8/2019		
27	L 27	equations solvable for y.	2/9/2019		
28	L 28	equations solvable for x and Clairaut's type.	4/9/2019		
29	L 29	Second order linear differential equations with constant coefficients.	5/9/2019		
30	L 30	Complementary function & particular integral of linear ODE with constant coeff.	6/9/2019		
31	L 31	Complementary function & particular integral of linear ODE with constant coeff.	9/9/2019		
32	L 32	Method of variation of parameters.	11/9/2019		
33	L 33	Cauchy and Legendre's linear differential equations.	12/9/2019		
34	L 34	Practice questions	13/9/2019		
35	L 35	Multiple Integration.	16/9/2019		
36	L 36	Double integrals (Cartesian)	18/9/2019		
37	L 37	change of order of integration in double integrals.	19/9/2019		
38	L 38	Change of variables (Cartesian to polar).	25/9/2019		
39	L 39	Application of double integral in areas.	26/9/2019		
40	L 40	Application of double integral in volumes.	27/9/2019		
41	L 41	orthogonal curvilinear coordinates.	30/9/2019		
42	L 42	orthogonal curvilinear coordinates.	3/10/2019		
43	L 43	Simple applications involving cubes & spheres.	4/10/2019		
44	L 44	Simple applications involving cubes & spheres.	7/10/2019		
45	L 45	applications involving rectangular parallelepipeds.	9/10/2019		
46	L 46	Practice questions	10/10/2019		

47	L 47	Introduction of vectors, Scalar and Vector point functions.	11/10/2019		
48	L 48	Gradient with its properties.	14/10/2019		
49	L 49	Directional derivative.	16/10/2019		
50	L 50	Divergence with its properties.	17/10/2019		
51	L 51	Divergence with its properties.	18/10/2019		
52	L 52	Curl with its properties.	23/10/2019		
53	L 53	Line integrals,	24/10/2019		
54	L 54	surface integrals.	25/10/2019		
55	L 55	volume integrals.	4/11/2019		
56	L 56	Green theorem	6/11/2019		
57	L 57	Stokes theorem.	7/11/2019		
58	L 58	Gauss Divergence theorem	8/11/2019		
59	L 59	Practice questions	11/11/2019		
60	L 60	Revision of syllabus	13/11/2019		
61	L 61	Revision of syllabus	14/11/2019		
62	L 62	Revision of syllabus	15/11/2019		
63	L 63	Revision of syllabus	18/11/2019		
64	L 64	Revision of syllabus	20/11/2019		