JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : B.Tech	**Session : 2020-2024**	**Year : 2nd**	**Sem: 3rd**
Course: Mathematics III			
Name of the Faculty: Prof. Sauraw Kumar Sharma	**Commencement Date:**	**Date of Closure:**	

Lecture No.	Week	Unit	Topics to be Covered	Blended Mode			Date	Duration	Tracking of Lectures	Related Course Outcome	Signature of Faculty	Signature of HoD	Remarks (if any)
				ICT Tool/Platform/ LMS	Resources	Activity							
1	1	1	Modul-1Laplace Transform, Properties of Laplace Transform										
2		1	Laplace transform of periodic functions										
3		1	Finding inverse Laplace transform										
4	2	1	Convolution theorem.										
5		1	Evaluation of integrals by Laplace transform										
6		1	Solving ODEs by Laplace Transform method										
7	3	1	Basic Concept of Fourier Series										
8		1	Fourier transforms										
9		1	Basic operations on sets, Cartesian products										
10		2	Disjoint union (sum), and power sets. Different types of relations, their compositions and inverses										

11	4	2	Different types of functions, their compositions and inverses.										
12		2	Different types of functions, their compositions and inverses.										
13	5	2	Basic counting techniques –inclusion and exclusion,										
14		2	Pigeon-hole principle										
15		3	Permutation, combination										
16	6	3	summations										
17		3	Introduction to recurrence relation										
18		3	Generating functions										
19	7	4	Introduction to Graph										
20		4	Graphs and their basic properties										
21		4	Eulerian walk										
22	8	4	Hamiltonian walk										
23		4	Algebraic structures with one binary operation										
24		5	Semi group, monoid and group										
25		5	Cosets, Lagrange’s theorem										

26	9	5	subgroup										
27		6	normal subgroup, homomorphic group										
28	10	6	Congruence relation										
29		6	Quotient group.										
30		6	Algebraic structures with two binary operationsring										
31	11	6	Integral domain										
32		6	Field.										
33		7	Boolean algebra and boolean ring										