JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : B.Tech Vth	**Session : 2019 - 2023**	**Year : 2022**	**Sem: 5th**
Course: Numerical & Statistical Methods			
Name of the Faculty: 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		**Module 1 -** Numerical Methods: Solution of algebraic and transcendental equations by bisection										
2			Iteration Method - with example										
3			Regula Falsi Method - with example										
4	2		Newton Raphson methods - with example										
5			Solution of a system of linear simultaneous equations by Gauss elimination										
6			Solution of a system of linear simultaneous equations by Gauss-Jordan										
7	3		Jacobi Method										
8			Gauss Seidel methods										
9			**Module 2 -** Finite difference, Symbolic relations										
10	4		Interpolation and extra polation										
11			Newton-Gregory forward and backward										
12			Gauss forward and backward										

13			Numerical differentiation and integration										
14	5		Trapezoidal, Simpson's 1/3rd Rule										
15			Simpson's 3/8th Rule										
16			Euler's, Modified Euler's Rule										
17	6		Runge-Kutta Method										
18			Milne's methods										
19			**Module 3 -** Probability: Various approaches of probability										
20	7		conditional probability - with examples										
21			Total Probability Theorem - with examples										
22			Random variable: Definition, probability mass & density functions										
23	8		Distribution function - with examples										
24			Mathematical expectation and moment generating function										
25			**Module 4 -** Measure of central tendency - Mean for discrete and continuous data										
26	9		Median, Mode - with problems										
27			Measure of Dispersion - Range, Mean Deviation										
28			Standard Deviation and Variance										
29	10		Statistical Methods: Moments, skewness and kurtosis										
30			Curve fitting										

31			Correlation, correlation coefficients										
32	11		Regression lines, regression coefficients and their properties - continues										
33			regression lines, regression coefficients and their properties.										
34			Revision										
35	12		Revision										
36			Revision										