

Lesson Plan & Work-done Diary for AY:2026-27, Odd Semester

Course with Code: Probability, Distributions and Statistics -1BMATCS301				Faculty:			Semester & Section: III CD	
Class No.	Date Planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-2: Statistics								
1		Principles of least squares, Curve fitting by the method of least squares in the form: $y=a+bx$	Chalk and Talk	1				
2		Curve fitting by the method of least squares in the form: $y=a+bx+cx^2$,	Chalk and Talk	2				
3		Curve fitting by the method of least squares in the form: $y=ax^b$.	Chalk and Talk	3				
4		Coefficient of correlation	Chalk and Talk	4				
5		Coefficient of correlation-Problems	Chalk and Talk	5				
6		Lines of regression	Chalk and Talk	6				
7		Angle between regression lines	Chalk and Talk	7				
8		Rank correlation.	Chalk and Talk	8				

Course with Code: Probability, Distributions and Statistics -1BMATCS301				Faculty:			Semester & Section: III CD	
Class No.	Date Planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-3: Probability Distributions								
9		Review of basic probability theory. Random variables (discrete and continuous)	Chalk and Talk					
10		Probability mass and density functions	Chalk and Talk					
11		Mathematical expectation: mean and variance- Problems	Chalk and Talk					
12		Binomial Distribution-Derivation	Chalk and Talk					
13		Problems on Binomial Distribution	Chalk and Talk					
14		Poisson Distribution-Derivation	Chalk and Talk					
15		Problems on Poisson Distribution	Chalk and Talk					
16		Normal Distribution-Problems	Chalk and Talk					
17		Problems on Normal Distribution	Chalk and Talk					

Course with Code: Probability, Distributions and Statistics -1BMATCS301				Faculty:			Semester & Section: III CD	
Class No.	Date Planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-1: Modular Arithmetic								
18		Introduction to Congruences, Linear Congruences	Chalk and Talk					
19		The Remainder theorem	Chalk and Talk					
20		Solving Polynomials	Chalk and Talk					
21		Linear Diophantine Equation	Chalk and Talk					
22		System of Linear Congruences, Euler's Theorem	Chalk and Talk					
23		Wilson Theorem	Chalk and Talk					
24		Fermat's little theorem.	Chalk and Talk					
25		Applications of Congruences- RSA algorithm.	Chalk and Talk					

Course with Code: Probability, Distributions and Statistics -IBMATCS301				Faculty:			Semester & Section: III CD	
Class No.	Date Planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-4: Joint Probability distribution								
26		Joint Probability distribution for two discrete random variables, expectation, covariance and correlation.	Chalk and Talk					
27		Joint Probability distribution-Problems	Chalk and Talk					
28		Problems on Joint Probability distribution	Chalk and Talk					
29		Markov Chain: Introduction to Stochastic Process, Probability Vectors, Stochastic matrices, Regular stochastic matrices,	Chalk and Talk					
30		Markov chains, Higher transition probabilities.	Chalk and Talk					
31		Stationary distribution of Regular Markov chains.	Chalk and Talk					
32		Markov chains-Problems	Chalk and Talk					
33		Problems on Markov Chain	Chalk and Talk					

Course with Code: Probability, Distributions and Statistics -IBMATCS301				Faculty:			Semester & Section: III CD	
Class No.	Date Planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-5: Statistical Inference								
34		Sampling distribution, standard error. Levels of significance. Testing of hypothesis.	Chalk and Talk					
35		Test of significances. Confidence limits, simple sampling of attributes. Sampling variables	Chalk and Talk					
36		Central limit theorem and confidences limit for unknown mean	Chalk and Talk					
37		Test of significance for large samples (mean, proportion).	Chalk and Talk					
38		Comparison of large samples (mean, proportion).	Chalk and Talk					
39		Test of Significance for means of two small samples	Chalk and Talk					
40		Students-‘t’ distribution	Chalk and Talk					
41		Students-‘t’ distribution and Chi-square distribution	Chalk and Talk					
42		Chi-square distribution as a test of goodness of fit.	Chalk and Talk					

	Activity	Planned	Actual	Remarks
1	Theory Classes	42		
2	Assignments/ Quizzes/ Self-study	5 Assignments and 5 Quizzes		
3	Tutorials/ Extra classes	20		
4	Internal Assessments	3		
5	ICT based Teaching (% of usage in Curriculum)			
Planning			Execution	
Faculty Signature:			Faculty Signature:	
HoD Signature:			HoD Signature:	