

**STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI**

**COURSE PLAN (November 2024 – April 2025)**

<b>Department</b>	<b>: Mathematics</b>
<b>Names of the faculty</b>	<b>: Dr. Arputha Christy K</b>
<b>Course Title</b>	<b>: MATHEMATICS FOR COMPUTER SCIENCE II</b>
<b>Course Code</b>	<b>: 23MT/AC/MS45</b>
<b>Shift</b>	<b>: II</b>
<b>Class and Section</b>	<b>: BCA (Sec B)</b>

**COURSE OUTCOMES (COs)**

<b>COs</b>	<b>Description</b>	<b>CL</b>
<b>CO1</b>	define and recall the basic statistical tools and techniques available to study any given data	K1
<b>CO2</b>	understand the core principles and terminology of statistics, including population, sample and distribution functions	K2
<b>CO3</b>	apply the knowledge and extract meaningful insights and patterns from data, enabling informed decision-making	K3
<b>CO4</b>	examine and interpret data through rigorous statistical methods and techniques	K4
<b>CO5</b>	develop problem-solving skills by using statistical methods to address complex and multifaceted issues in real life	K5

<b>Week</b>	<b>Unit No.</b>	<b>Content</b>	<b>Cognitive Level</b>	<b>Teaching Hours</b>	<b>Cos</b>	<b>Teaching Learning Methodology</b>	<b>Assessment Methods</b>
Nov 18 – 25, 2024 (Day Order 1-6)	I	<b>Theoretical Distributions</b> 1.1 Binomial Distribution 1.2 Properties of Binomial Distribution	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz and Slip Test
Nov 26- Dec 3, 2024 (Day Order 1 to 6)	I	1.3 Fitting of Binomial Distribution 1.4 Normal Distribution	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz and Slip Test
Dec 4-11, 2024 (Day Order 1 to 6)	I  II	1.4 Normal Distribution 1.5 Characteristics of the Normal Curve  <b>Tests of Significance</b> 2.1 Testing of Hypothesis	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz and Slip Test
Dec 12-19, 2024 (Day Order 1 to 6)	II	2.2 Tests of Significance for Attributes 2.3 Tests of Significance for Large Samples	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz and Slip Test
Dec 20, 2024 (Day Order 1)	No class						
Jan 3 – 7, 2025 (Day Order 3 to 6)	II	2.3 Tests of Significance for Large Samples  2.4 Tests of Significance	K1-K5	4	CO1-5	Problem Solving and Group Work	Quiz and Slip Test

		for Difference between Means of two Samples					
Jan 8 – 17, 2024 (Day Order 1 to 6)	II  III	2.4 Tests of Significance for Difference between Means of two Samples  <b>Chi-Square Test</b> 3.1 Characteristics and Assumptions	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz and Slip Test
Jan 18 - 23, 2025	<b>C.A. Test – I- Unit I and Unit 2</b>						
Jan 24 -31, 2025 (Day Order 1 to 6)	III	3.1 Characteristics and Assumptions 3.2 Goodness of Fit	K1-K5	5	CO1-5	Problem Solving and Group Work	<b>III Component (Part I- 25 marks - Problems from Unit III)</b>
Feb 3-8, 2025 (Day Order 1 to 6)	III	3.2 Goodness of Fit 3.3 Test of Independence	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz and Slip Test
Feb 10– 18, 2025 (Day Order 1 to 4)	III IV	3.3 Test of Independence  <b>Correlation and Regression</b> 4.1 Correlation and Causation 4.2 Types of Correlation	K1-K5	3	CO1-5	Problem Solving and Group Work	Quiz and Slip Test
Feb 19- 26, 2025	IV	4.3 Karl Pearson’s Coefficient of	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz and Slip Test

(Day Order 1-6)		Correlation 4.4 Correlation of Grouped Bi-variate Data 4.5 Regression					
Feb 27- Mar 6, 2025 (Day Order 1 to 6)	IV	4.6 Difference between Correlation and Regression 4.7 Methods of Studying Regression – Algebraic Method	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz
Mar 7 – 11, 2025 (Day Order 1 to 3)	IV  V	4.7 Methods of Studying Regression – Algebraic Method  <b>Analysis of Variance</b> 5.1 Basic Designs of Experiment 5.2 One Way Classification	K1-K5	2	CO1-5	Problem Solving and Group Work	Quiz  <b>III Component Part II- 25 marks - Problems from Unit V</b>
Mar 12 –17, 2025	<b>C.A. Test – II(Unit 3 and Unit 4)</b>						
Mar 18 – 20, 2025 (Day 4 to 6)	IV	5.2 One Way Classification 5.3 Two Way Classification	K1-K5	3	CO1-5	Problem Solving and Group Work	Quiz
Mar 21 - 28, 2025 (Day Order 1 to 6)	V	5.2 One Way Classification 5.3 Two Way Classification	K1-K5	5	CO1-5	Problem Solving and Group Work	Quiz

Mar 29- April 2, 2025  
(Day Order 1 to 3)

**REVISION**

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