Department of Master of Computer Applications
CA2 Topics and Exam Schedule for Third Semester
Session 2025 - 2026

Sl no.	Paper code	Topic Name	Assigned Roll Number
1.	MCAN - 301	1. SDLC 2. COHESION AND COUPLING 3. Class Relationships 4. UML 5. Inheritance	Topic 1: MCA/24/1 to MCA/24/5 Topic 2: MCA/24/6 to MCA/24/10 Topic 3: MCA/24/11 to MCA/24/15 Topic 4: MCA/24/16 to MCA/24/20 Topic 5: MCA/24/21 to MCA/24/25
2	MCAN - 302	1. AO* Algorithm 2. Min-Max Algorithm with example 3. Alpha-Beta Prunning 4. Knowledge Representation 5. Proving A* as Admissible With Example	Topic 1: MCA/24/1 to MCA/24/5 Topic 2: MCA/24/6 to MCA/24/10 Topic 3: MCA/24/11 to MCA/24/15 Topic 4: MCA/24/16 to MCA/24/20 Topic 5: MCA/24/21 to MCA/24/25
3	MCAN - 303	1. Back substitution method 2. Recursive Tree/Tracing Tree method. 3. Asymptotic Notation. 4. Masters Theorem. 5. What is greedy algorithm? Explain fractional knapsack problem. 6. What is Dynamic algorithm? Explain Matrix Chain Algorithm	Topic 1/6: MCA/24/1 to MCA/24/5 Topic 2/6: MCA/24/6 to MCA/24/10 Topic 3/6: MCA/24/11 to MCA/24/15 Topic 4/6: MCA/24/16 to MCA/24/20 Topic 5/6: MCA/24/21 to MCA/24/25
4	MCAN –E305G	1. Describe how the Decision Tree makes decision. 2. What is Scaler and Vector? Describe how they are related to Machine Leaning. 3. Why Bayes Theorem is Important to Machine Learning. 4. How Conditional Probability is different from Bayes Theorem 5. Define Ensemble Learning with Proper Example .	Topic 1: MCA/24/1 to MCA/24/5 Topic 2: MCA/24/6 to MCA/24/10 Topic 3: MCA/24/11 to MCA/24/15 Topic 4: MCA/24/16 to MCA/24/20 Topic 5: MCA/24/21 to MCA/24/25

5	MCAN - E304D	1. Describe PHP and its Role in Web Development. 2. Describe PHP Environment Setup and Configuration. 3. How much HTML and CSS is important to Web Development. 4. How HTML, CSS and JS are interrelated to each other. 5. Define HTML Structure and Semantics and CSS Selectors and Styling.	**Topic 1: MCA/24/1 to MCA/24/5** **Topic 2: MCA/24/6 to MCA/24/10** **Topic 3: MCA/24/11 to MCA/24/15** **Topic 4: MCA/24/16 to MCA/24/20** **Topic 5: MCA/24/21 to MCA/24/25**

CA2 Exam Guide

Sl no	Paper code	Paper Name
1	MCAN - 301	Software Engineering using UML
2	MCAN - 302	Artificial Intelligence
3	MCAN - 303	Design and Analysis of Algorithm
4	MCAN - E304D	Web Technology using PHP
5	MCAN - E305G	Machine Learning

Note: All the students must prepare a 5- pages report using A4 Sheet (including title page) on the assigned topic. The title page should have the session 2025–2026 mentioned. Submit the PDF via the Google Form which will be shared in your Whatsapp group within 8.9.2025 to 10.09.2025. You also need to submit the hard copy of your handwritten report during this period in the department.