

Register Number:.....

**MCA DEGREE EXAMINATIONS: NOV/DEC 2024**

(Regulation 2020)

Second / Third Semester

**MASTER OF COMPUTER APPLICATION**

P20CAE0020: User Interface Design and User Experience

**COURSE OUTCOMES**

- CO1:** Build UI for user Applications.
- CO2:** Know the UI Interaction behaviours and principles.
- CO3:** Evaluate UX design of any product or application.
- CO4:** Demonstrate UX Skills in product development.
- CO5:** Implement Sketching principles.
- CO6:** Create Wireframe and Prototype.

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions: -**

**PART A (10 x 2 = 20 Marks)**

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|--|-----|-------------------|
| 1. Differentiate between UI and UX design.                 | CO1 | [K <sub>2</sub> ] |
| 2. Explain the core stages of the design thinking process. | CO1 | [K <sub>1</sub> ] |
| 3. What is interaction behaviour in UI design?             | CO2 | [K <sub>1</sub> ] |
| 4. Why is branding important in UI design?                 | CO2 | [K <sub>2</sub> ] |
| 5. How does UX align with business goals?                  | CO3 | [K <sub>2</sub> ] |
| 6. What is the role of a UX designer?                      | CO3 | [K <sub>1</sub> ] |
| 7. What is the purpose of creating personas?               | CO4 | [K <sub>1</sub> ] |
| 8. Define solution ideation in design.                     | CO4 | [K <sub>2</sub> ] |
| 9. Explain the concept of responsive design.               | CO5 | [K <sub>2</sub> ] |
| 10. What is a red route in UX?                             | CO6 | [K <sub>1</sub> ] |

**PART B (6 x 5 = 30 Marks)**

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|--|-----|-------------------|
| 11. Discuss the relationship between brainstorming, game storming and problem-solving in design. | CO1 | [K <sub>2</sub> ] |
| 12. Explain the role of visual hierarchy in UI design.   | CO2 | [K <sub>2</sub> ] |

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|-----|---|-----|-------------------|
| 13. | Discuss the relationship between user needs and business goals in UX.             | CO3 | [K <sub>2</sub> ] |
| 14. | Describe the ideation process and its significance in solution development.       | CO4 | [K <sub>3</sub> ] |
| 15. | Explain how user stories and scenarios help in UX design.                         | CO5 | [K <sub>3</sub> ] |
| 16. | Evaluate the significance of synthesizing test findings in the UX design process. | CO6 | [K <sub>3</sub> ] |

**Answer any FIVE Questions**

**PART C (5 x 10 = 50 Marks)**

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|-----|---|-----|-------------------|
| 17. | Analyze the role of empathy in UX research and how it impacts the overall user-centered design process. | CO1 | [K <sub>3</sub> ] |
| 18. | Explain how visual and interaction principles can enhance usability in digital products.                | CO2 | [K <sub>3</sub> ] |
| 19. | Evaluate the methods and tools used for effective UX research.  | CO3 | [K <sub>4</sub> ] |
| 20. | Describe how information architecture improves user navigation and content organization.                | CO4 | [K <sub>3</sub> ] |
| 21. | Analyze the role of interaction patterns in building intuitive user interfaces.                         | CO5 | [K <sub>3</sub> ] |
| 22. | Evaluate the importance of iterative prototype testing and how it refines the design process.           | CO6 | [K <sub>4</sub> ] |

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