

**THE KAVERY ENGINEERING COLLEGE**  
(An Autonomous Institution)

**B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025**

*Fifth Semester*

*Artificial Intelligence and Data Science*

**CCS370 – UI and UX Design**

*Regulations - 2021*

*Duration : 3 Hrs*

*Maximum : 100 Marks*

**PART – A (ANSWER ALL QUESTIONS) (Marks 10\*2=20)**

| <i>Q.No</i> | <i>Questions</i>                                          | <i>BLT</i> | <i>CO</i> | <i>Marks</i> |
|-------------|-----------------------------------------------------------|------------|-----------|--------------|
| 1.          | Define the difference between UI and UX design.           | L1         | 1         | 2            |
| 2.          | List core stages of design thinking in UX.                | L1         | 1         | 2            |
| 3.          | State the importance of UI elements and patterns.         | L2         | 2         | 2            |
| 4.          | Describe how branding influences UI design.               | L2         | 2         | 2            |
| 5.          | What is meant by user experience? Why is it important?    | L1         | 3         | 2            |
| 6.          | Identify two research methods used in UX design.          | L2         | 3         | 2            |
| 7.          | Outline the process of creating a wireframe.              | L2         | 4         | 2            |
| 8.          | Describe the role of usability tests in prototyping.      | L2         | 4         | 2            |
| 9.          | Discuss the importance of problem statements in design.   | L2         | 5         | 2            |
| 10.         | What is information architecture, and why is it critical? | L1         | 5         | 2            |

**PART – B (ANSWER ALL QUESTIONS) (Marks 5\*16 = 80)**

| <i>Q.No</i> | <i>Questions</i>                                                                         | <i>BLT</i> | <i>CO</i> | <i>Marks</i> |
|-------------|------------------------------------------------------------------------------------------|------------|-----------|--------------|
| 11.         | a i Discuss divergent and convergent thinking in design thinking.                        | L2         | 1         | 8            |
|             | ii Explain the importance of empathy in user-centered design.                            | L2         | 1         | 8            |
|             | Or                                                                                       |            |           |              |
|             | b i Compare brainstorming and gamestorming as methods for ideation.                      | L2         | 1         | 8            |
|             | ii Explain observational empathy and its role in UX design.                              | L2         | 1         | 8            |
| 12.         | a Examine the key principles of visual hierarchy in UI design.                           | L4         | 2         | 16           |
|             | Or                                                                                       |            |           |              |
|             | b Analyze how interaction behaviors impact user experience.                              | L4         | 2         | 16           |
| 13.         | a Identify the steps involved in a UX research process and UX research methodology.      | L3         | 3         | 16           |
|             | Or                                                                                       |            |           |              |
|             | b Examine the concept of user experience and analyze why it is important for businesses. | L3         | 3         | 16           |

|     |    |                                                                     |    |   |    |
|-----|----|---------------------------------------------------------------------|----|---|----|
| 14. | a  | Analyze the process of creating a high-fidelity mockup.             | L4 | 4 | 16 |
|     | Or |                                                                     |    |   |    |
|     | b  | Examine the importance of iterative testing in the prototype phase. | L4 | 4 | 16 |
| 15. | a  | Examine how to create personas and analyze their role in UX design. | L4 | 5 | 16 |
|     | Or |                                                                     |    |   |    |
|     | b  | Analyze how scenarios can aid in identifying user needs.            | L4 | 5 | 16 |