INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal-500043, Hyderabad

B.Tech VII SEMESTER END EXAMINATIONS (REGULAR) - DECEMBER 2023
Regulation: UG-20
HUMAN COMPUTER INTERACTION (UI&UX)
(COMMON TO CSE | CSE(AI&ML) | CSE(DS) | CSE(CS) | CSIT | IT)

Time: 3 Hours   **Max Marks: 70**

Answer ALL questions in Module I and II
Answer ONE out of two questions in Modules III, IV and V
All Questions Carry Equal Marks
All parts of the question must be answered in one place only

MODULE – I

1. (a) Compare and contrast physical design and conceptual design in terms of designing an interactive system. [BL: Understand| CO: 1|Marks: 7]

   (b) List the different types of scenarios in designing process. Explain any two of the scenarios used throughout the design. [BL: Understand| CO: 1|Marks: 7]

MODULE – II

2. (a) Sketch the requirement template and explain the requirement specification produced to the client. How will you prioritize the requirements? [BL: Understand| CO: 2|Marks: 7]

   (b) The home information system aims to be a new device for the home. Categorize the functional and non-functional requirements with its related issues. [BL: Apply| CO: 2|Marks: 7]

MODULE – III

3. (a) Classify different types of menus with relevant diagrams.Enumerate the uses of menus in an interface. [BL: Understand| CO: 3|Marks: 7]

   (b) Present the principles from memory and attention to understand the people's ability to remember and attend to things. [BL: Understand| CO: 3|Marks: 7]

4. (a) How can you add sounds to the interface? Briefly describe about earcons, auditory icons and soundscapes. [BL: Understand| CO: 4|Marks: 7]

   (b) What is gestural interaction? List and explain about the gestures available in IoS with its actions. [BL: Understand| CO: 4|Marks: 7]

MODULE – IV

5. (a) Conceptualize the development of website in terms of the five elements at various levels. [BL: Understand| CO: 5|Marks: 7]

   (b) Organizing being an important part of designing, sketch the various organizational structures available in designing a website with necessary diagrams. [BL: Apply| CO: 5|Marks: 7]

6. (a) Deduce the key challenges faced for collaborative working. Illustrate the development of a collaborative tabletop application. [BL: Understand| CO: 5|Marks: 7]

   (b) While designing interactive systems, discuss the trade-off between security and usability. How can designers choose the most appropriate approach for a given project? [BL: Apply| CO: 5|Marks: 7]

MODULE – V

7. (a) Criticize on the various methods used for understanding the leisure activities of teenagers as per Bellotti et al. [BL: Understand| CO: 6|Marks: 7]

   (b) Identify the three objects found in information spaces. Conceptualize the information space with the diagram consisting of the three objects and the communication among them. [BL: Apply| CO: 6|Marks: 7]

8. (a) Give an explanation of ubiquitous computing. Explain how ubiquitous computing functions in a smart home application? [BL: Understand| CO: 6|Marks: 7]

   (b) Comment on the spacesuit, the ultimate wearable computer design. Use the tidy diagram to identify each of their parts. [BL: Understand| CO: 6|Marks: 7]

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