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**Presidency University**

**Bengaluru**

 **School Of Computer Science and Engineering & Information Science**

**End-Term Examinations, Aug 2024**

**Date**: 5-8-2024

**Time**: 9.30AM-12.30 PM

**Max Marks**: 100

**Weightage**: 50%

**Odd Semester**: 2023 - 24

**Course Code**: CSA3010

**Course Name**: Human-Computer Interaction (HCI) for game design.

**Department: SOIS-BCA**

 **Instructions:**

1. *Read the all questions carefully and answer accordingly.*
2. *Do not write any matter on the question paper other than roll number.*

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| **Q.No** | **Questions** | **Marks** | **CO** | **RBT** |
| 1 | 1. Write the two difference between recall and recognition memory.
 | 4 | CO1 | L1 |
| 1. Explain sensory visual perception with a neat diagram?
 | 6 | CO1 | L2 |
| c.Discuss how the principles of HCI can influence the overall user experience of an interactive system. Provide key aspect of HCI. | 10 | CO1 | L3 |
| OR |
| 2 | a.State cognition in HCI?. | 4 | CO1 | L1 |
| b.Explain the key aspects of sensory memory? | 6 | CO1 | L2 |
| **c.**Describe the Key aspects of Human-Computer Interaction (HCI) that are essential for designing effective and user-friendly computer systems? | 10 | CO1 | L3 |

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| 3 | a.Compare and contrast the use of personas, scenarios, and storyboards in understanding user requirements during the design process. | 4 | CO2 | L1 |
| **b.**Describe the Principles of Inclusive Design?  | 6 | CO2 | L2 |
| c.Explain the principles of Fitts' Law. Provide valuable insights into the design of interactive systems that optimize the speed and accuracy of user interactions. | 10 | CO2 | L3 |

OR

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| 4 | 1. Identify and briefly explain three types of prototyping design commonly used in HCI.
 | 4 | CO2 | L1 |
| 1. Explain the 7 Principles of Universal Design?
 | 6 | CO2 | L2 |
| 1. Explain the Inclusive Design and Designing for Accessibility?
 | 10 | CO2 | L3 |

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| 5 | 1. Explian Market analysis vs. market research
 | 4 | CO3 | L1 |
| 1. Describe the various types of Tools and their purposes.
 | 6 | CO3 | L2 |
| 1. Explain the concept of Needs Finding and the requirements for Tools
 | 10 | CO3 | L3 |

OR

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| 6 | 1. Explain the Principles of Interface Design.
 | 4 | CO3 | L1 |
| 1. Discuss the importance of Market Research and its various types
 | 6 | CO3 | L2 |
| 1. Identify and explain the Tools used for Market Research.
 | 10 | CO3 | L3 |

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| 7 | 1. Define Wearable Devices and discuss their applications
 | 4 | CO4 | L1 |
| 1. Explain the concepts of Mechanoreceptors and Artificial Mechanoreceptors.
 | 6 | CO4 | L2 |
| 1. Compare and contrast Haptics and Ultrahaptics.
 | 10 | CO4 | L3 |

OR

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| 8 | 1. What are Brain-Computer Interfaces (BCI) and how do they work?
 | 4 | CO4 | L1 |
| 1. Discuss the Principles of Visual Design and their importance.
 | 6 | CO4 | L2 |
| 1. what is the model-based evaluation and Stereotype threat?
 | 10 | CO4 | L3 |

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| 9 | 1. Define Semiotics and Symbolism and explain their relevance in design.
 | 4 | CO4 | L1 |
| 1. Explain the impact of Virtual Reality on Visual Perception and Illusion.
 | 6 | CO4 | L2 |
| 1. Define Visual Sensation and Perception and discuss their differences.
 | 10 | CO4 | L3 |

OR

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| 10 | 1. What are the Basic Elements of Visual Design?
 | 4 | CO4 | L1 |
| 1. What are Multimodal Interfaces and how do they enhance user interaction?
 | 6 | CO4 | L2 |
| 1. How do they contribute to a composition of basic Elements of Visual Design?
 | 10 | CO4 | L3 |