|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Roll No |  |  |  |  |  |  |  |  |  |  |  |  |

****

**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.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 |