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## School of Computing Science and Engineering

B.TECH in Artificial Intelligence and Data Science

Semester End Examination - Nov 2023

Duration : 180 Minutes

Max Marks : 100

### Sem VII - CSAI4701 - Human Computer Interaction

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) State the concept of Ergonomics K1 (2)
- 2) Recognize the contrasts between the concepts of usability and user experience (UX) in the context of HCI. How do they influence each other? K2 (4)
- 3) Summarize the challenges and opportunities of designing user interfaces for emerging technologies, such as autonomous vehicles or smart home devices. K2 (6)
- 4) Classify the nuances between dragged object versus drop target. K3 (9)
- 5) Interpret the role of beta testing in collecting user feedback before the official release of a mobile application. K3 (9)
- 6) Weigh the importance for websites and apps to have big buttons and clear text, especially for younger users. K5 (10)
- 7) Deconstruct the model of human memory with diagram K4 (12)
- 8) Justify the features of an interface for a meditation app that promotes relaxation and mindfulness, providing calming visuals and soothing audio. K5 (15)
- 9) Elaborate on the principles underlying the creation of personae and the development of scenarios within the design process. K5 (15)
- 10) Create a gesture-based control system for a home automation application, allowing users to manage smart devices with intuitive hand movements. Give vivid description with sample use cases. K6 (18)