

## EVEN SEMESTER EXAMINATION, 2022 – 23

COURSE: M.TECH

BRANCH: Computer Science &amp; Engineering

SEMESTER: 2<sup>nd</sup>

SUBJECT: Human Computer Interaction

Duration: 3:00 hrs

Max Marks: 100

*Note: - Attempt all questions. All Questions carry equal marks. In case of any ambiguity or missing data, the same may be assumed and state the assumption made in the answer.*

Q 1.	Answer any four parts of the following. a) Define HCI. What are the goals of HCI? b) Describe the roles of sight, hearing & touch senses in HCI. c) Explain the global structure of navigation design. d) Explain the Elements of WIMP Interface. e) Define prototyping. Explain prototyping techniques. f) Explain Keystroke-level model.	5x4=20
Q 2.	Answer any four parts of the following. a) Explain the different types of mobile applications. b) What are the elements of mobile 2.0 designs? c) What are the Socio-Organizational issues in Cognitive models? d) What are the important human characteristics that have an influence on design? e) Explain: (i) Contextual Tools      (ii) Inlays and Virtual Pages f) What is the role of reasoning in HCI? Explain deductive, inductive and abductive reasoning.	5x4=20
Q 3.	Answer any two parts of the following. a) Explain the various phases of HCI software life cycle. b) Define groupware. Explain the Different types of Computer-Mediated Communication system. c) Explain notification based programming paradigm and also it compare with read-evaluate loop paradigm.	10x2= 20
Q 4.	Answer any two parts of the following. a) What is design rationale? What are the benefits of using design rationale? Explain Maclean design space analysis model. b) List the Shneiderman's eight golden rules of interface design. c) How reasoning is useful to improve human memory? What are the different types of reasoning used in everyday life?	10x2= 20
Q 5.	Answer any two parts of the following. a) List the Norman's seven principles for transforming difficult task to simple task. b) Explain CCT model and also it compare with GOMS model. c) Explain any two: i) Eyegaze ii) Cockpit and Virtual Controls iii) Virtual Reality Helmets	10x2= 20