MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
VII SEMESTER B.TECH.
END SEMESTER EXAMINATION (JAN 2024)
SUBJECT: HUMAN COMPUTER INTERFACE (CSE 4069)

Duration: 3 Hours Date: 07/12/2023 MAX.MARKS: 50

NO.	Question	M	CLO	AHEP LO	BL
1A	What can a system designer do to minimize the user's memory load? Illustrate with an example.	4	1	1	1
1B	Reasoning is the process by which we use the knowledge to draw conclusions or infer something new about the domain of interest – Justify. Explain various kinds of reasoning.	3	1	1	2
1C	Interpret the positioning aspect of the following devices. a) Stylus and light pen b) digitizing tablets	3	1	1	3
2A	How can an interactive system be developed to ensure its usability? Illustrate with a computer interface module.	4	2	1	1
2B	Discuss the advances in interaction concerning a) The concept of time-sharing and b) Programming toolkits.	3	2	1	6
2C	"Achieving goals within constraints: Is this a definition of a good computer interface design" - Discuss.	3	2	1	6
3A	Illustrate how Norman's Seven Principles for Transforming Difficult Tasks into Simple Ones proves true.	4	3	3,5	2
3B	Summarize various principles affecting flexibility in which the user and system exchange information.	3	3	3,5	3
3C	Illustrate how the walkthrough method works for a video recorder by a remote controller.	3	3	3,5	4
4A	The user support design should not be seen as an 'add-on' to system design – discuss.	3	4	3,5	3
4B	Change the root definition of an Airline booking system from the airline owner's perspective to the Customer's perspective.	4	4	3,5	4
4C	Compare *turn-taking*, *round-robin*, and *free-for-all* as floor control mechanisms. When might each be effective?	3	4	3,5	1

5A	List four types of textual communications in current groupware and illustrate with a suitable diagram how hypertext-based systems avoid the implied sequentiality of a linear transcript.	4	4	3,5	4
5B	Thinking happens not just within the head, but in the external relationships with things in the world and with other people is distributed cognition – Justify.	3	5	1,2,3	3
5C	Illustrate a hierarchical task analysis of ‘making a cup of tea.’ How you can modify the task hierarchy for making lots of cups of tea?	3	5	1,2,3	4