

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,  
LONERE – RAIGAD -402 103  
Winter Semester Examination — Dec. 2019**

**Branch: Information Technology  
Subject:- Human Computer Interaction(BTITOE505B)  
Date:- 18/12/2019**

**Sem.: - V  
Marks: 60  
Time:- 3 Hr.**

**Instructions to the Students**

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

**Q.1.**

- a) Illustrate human eye with suitable diagram. **06**  
b) Elucidate Human memory in detail **06**

**Q.2.**

- a) Describe any 5 Nielsen's heuristics principle in details. **06**  
b) Enlist three principles that support usability of system. Explain any one in detail. **06**

**Q.3.**

- a) What is Socio-technical models ? Explain any three key stages in CUSTOM methodology . **06**  
b) Illustrate GOMS in detail. **06**

**Q.4.**

- a) Describe Interaction styles ,Explain Direct Manipulation method **06**  
b) Explain in detail Interaction Devices and its applications. **06**

**Q.5.**

- a) How Information will be treated as wealth of human, Describe Information search in detail. **06**  
b) Describe User Documentation with suitable examples **06**

**Q.6.**

- a) What is Hypertext used for, how does Hypertext work **06**  
b) Illustrate Ubiquitous computing also explain its application **06**

**Paper End**

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE****Supplementary Summer Examination – 2023****Course: B. Tech.****Branch : CSE****Semester :V****Subject Code & Name: BTCOE504A Human Computer Interaction****Max Marks: 60****Date:17/08/2023****Duration: 3 Hr.*****Instructions to the Students:***

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

		(Level/CO)	Marks
<b>Q. 1</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Examine how text entry devices use in interaction</b>	<b>L4</b>	<b>6</b>
B)	<b>Explain the display technology CRT in detail.</b>	<b>L2</b>	<b>6</b>
C)	<b>Interpret short term memory model in detail.</b>	<b>L3</b>	<b>6</b>
<b>Q.2</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Explain interaction design process with diagram</b>	<b>L2</b>	<b>6</b>
B)	<b>Examine the activities in the water fall model of software life cycle.</b>	<b>L4</b>	<b>6</b>
C)	<b>Justify Shneiderman's eight golden rules of interface design.</b>	<b>L5</b>	<b>6</b>
<b>Q. 3</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Discuss architectures of windowing system</b>	<b>L2</b>	<b>6</b>
B)	<b>Define evaluation. Analyze the cognitive walkthrough evaluation approach.</b>	<b>L4</b>	<b>6</b>
C)	<b>Explain the Seeheim model of UIMS.</b>	<b>L2</b>	<b>6</b>
<b>Q.4</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>What is stakeholders? Distinguish different categories of stakeholders.</b>	<b>L4</b>	<b>6</b>
B)	<b>Explain face to face communication in detail.</b>	<b>L2</b>	<b>6</b>
C)	<b>Define task analysis. Explain knowledge based techniques.</b>	<b>L2</b>	<b>6</b>
<b>Q. 5</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Explain centralized architecture of groupware.</b>	<b>L2</b>	<b>6</b>
B)	<b>Compare virtual and augmented reality</b>	<b>L4</b>	<b>6</b>
C)	<b>Examine application areas of hypermedia in detail.</b>	<b>L4</b>	<b>6</b>
	<b>*** End ***</b>		

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**  
**Supplementary Examination – 2023**

**Course: B. Tech.**

**Branch :Computer Science**

**Semester :VI**

**Subject Code & Name: Human Computer Interaction (BTCOE603 V -A)**

**Max Marks: 60**

**Date:**

**Duration: 3 Hr.**

***Instructions to the Students:***

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

		(Level/CO)	Marks
<b>Q. 1</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	Explain different types of reasoning.		<b>6</b>
B)	What are different positioning and pointing devices ? Explain in detail.		<b>6</b>
C)	What does long term memory of computer consists of ? Explain.		<b>6</b>
<b>Q.2</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	Which factors limit speed of interactive system ?		<b>6</b>
B)	Enlist and explain different interaction styles.		<b>6</b>
C)	Explain concept of multithreading in dialog system.		<b>6</b>
<b>Q. 3</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	What is design ?Explain design as a process.		<b>6</b>
B)	Describe different imaging models?		<b>6</b>
C)	State and explain the principles that affect learnability.		<b>6</b>
<b>Q.4</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	Explain different kinds of evaluation techniques.		<b>6</b>
B)	What are universal design principles.		<b>6</b>
C)	Explain User Interface Management System as conceptual architecture.		<b>6</b>
<b>Q. 5</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	Enlist and explain physical and device models.		<b>6</b>
B)	Explain virtual reality and augmented reality.		<b>6</b>
C)	What is hypertext? Describe the structure of linear text and hypertext.		<b>6</b>

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE****Winter Examination – 2022****Course: B. Tech.****Branch :Computer****Semester :V****Subject Code & Name: (BTCOE504A) Human computer Interaction****Max Marks: 60****Date:****Duration: 3 Hr.*****Instructions to the Students:***

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

		(Level/CO)	Marks
<b>Q. 1</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Interpret long term Memory in detail.</b>	<b>L3</b>	<b>6</b>
B)	<b>Explain concept of human Input Output Channel in detail.</b>	<b>L2</b>	<b>6</b>
C)	<b>Examine how text entry devices use in interaction.</b>	<b>L4</b>	<b>6</b>
<b>Q.2</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Explain Activities in software life cycles.</b>	<b>L2</b>	<b>6</b>
B)	<b>Where we use screen design and layout in HCI.</b>	<b>L3</b>	<b>6</b>
C)	<b>Justify Nielsons ten heuristics in details.</b>	<b>L5</b>	<b>6</b>
<b>Q. 3</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Define Evaluation? Analyze evaluation through Expert analysis.</b>	<b>L4</b>	<b>6</b>
B)	<b>Discuss elements of windowing system.</b>	<b>L2</b>	<b>6</b>
C)	<b>What is universal design? Explain principles of universal design.</b>	<b>L2</b>	<b>6</b>
<b>Q.4</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Discuss Goal and task hierarchy in cognitive model.</b>	<b>L2</b>	<b>6</b>
B)	<b>Explain Physical and Device Model in detail.</b>	<b>L2</b>	<b>6</b>
C)	<b>Explain Face to Face communication in detail.</b>	<b>L2</b>	<b>6</b>
<b>Q. 5</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
A)	<b>Examine World Wide Web in detail.</b>	<b>L4</b>	<b>6</b>
B)	<b>Explain concept of computer mediated communication.</b>	<b>L2</b>	<b>6</b>
C)	<b>Compare Virtual and Augmented reality.</b>	<b>L4</b>	<b>6</b>
	<b>*** End ***</b>		

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**

**Regular & Supplementary Winter Examination-2023**

**Course: B. Tech.**      **Branch : Computer Engineering / Computer Science and Engineering**      **Semester : 5**  
**Subject Code & Name:** **BTCOE504A & Human-Computer Interaction**  
**Max Marks: 60**      **Date:08-01-24**      **Duration: 3 Hr.**

**Instructions to the Students:**

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

	(Level/CO)	Marks
<b>Q. 1 Solve Any Two of the following.</b>		<b>12</b>
A) Write a note on Reasoning and Problem Solving.	CO1	6
B) Write a note on Devices For Virtual Reality And 3d Interaction.	CO1	6
C) State and explain the elements of the WIMP Interface.	CO1	6
<b>Q.2 Solve Any Two of the following.</b>		<b>12</b>
A) What do we understand by Scenarios in Design?	CO2	6
B) What is Design and explain the Golden Rule of Design.	CO2	6
C) State Shneiderman's Eight Golden Rules of Interface Design	CO2	6
<b>Q. 3 Solve Any Two of the following.</b>		<b>12</b>
A) State Nielsen's ten heuristics for evaluation.	CO3	6
B) State the Universal Design Principles.	CO3	6
C) Explain UIMS as a conceptual architecture.	CO3	6
<b>Q.4 Solve Any Two of the following.</b>		<b>12</b>
A) Write a note on GOMS.	CO4	6
B) Explain Keystroke-level model.	CO4	6
C) Explain face to face communication in detail.	CO4	6
<b>Q. 5 Solve Any Two of the following.</b>		<b>12</b>
A) Explain Computer Mediated Communication.	CO5	6
B) Write a note on Virtual Reality and Augmented Reality.	CO5	6
C) Explain the concept of Dynamic Web Content.	CO5	6

\*\*\* End \*\*\*

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,  
LONERE**

**Supplementary Summer Examination 2024**

**Course: B. Tech.**

**Branch : Computer Engineering /**

**Semester : V**

**Computer Science and Engineering**

**Subject Code & Name: BTCOE504A (Human-Computer Interaction)**

**Max Marks: 60**

**Date: 08-07-2024**

**Duration: 3 Hr.**

**Instructions to the Students:**

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

(Level/CO) Marks

<b>Q. 1</b>	<b>Solve Any Two of the following.</b>	<b>12</b>
A)	<b>Explain in brief for Reasoning and Problem Solving in HCI.</b>	CO1    6
B)	<b>Explain the different stages of HCI.</b>	CO1    6
C)	<b>Explain in brief about Human Memory with an example.</b>	CO1    6
<b>Q. 2</b>	<b>Solve Any Two of the following.</b>	<b>12</b>
A)	<b>What is design? Explain in brief for goals of design, constrains, tradeoff</b>	CO2    6
B)	<b>Explain Software Process in HCI</b>	CO2    6
C)	<b>Explain the key principles of usability and its components in HCI</b>	CO2    6
<b>Q. 3</b>	<b>Solve Any Two of the following.</b>	<b>12</b>
A)	<b>Write briefly about Nielsen's heuristics for evaluation.</b>	CO3    6
B)	<b>Explain the principles of Universal Design</b>	CO3    6
C)	<b>Explain the components of UIMS conceptual architecture with diagram</b>	CO3    6
<b>Q. 4</b>	<b>Solve Any Two of the following.</b>	<b>12</b>
A)	<b>Explain the concept of cognitive models in Human-Computer Interaction (HCI).</b>	CO4    6
B)	<b>Explain the concept of groupware and its relevance to collaborative HCI</b>	CO4    6
C)	<b>Discuss the importance of user-centered design principles in modeling rich interactions</b>	CO4    6
<b>Q. 5</b>	<b>Solve Any Two of the following.</b>	<b>12</b>
A)	<b>Explain the concept of Augmented Reality (AR) and its applications in various domains</b>	CO5    6
B)	<b>How does hypertext enhance information retrieval and navigation for users?</b>	CO5    6
C)	<b>Write short note on Dynamic Web Content.</b>	CO5    6

\*\*\* End \*\*\*