



Daffodil International University
Faculty of Science & Information Technology
Department of Information Technology & Management
Mid-Term Examination, Fall 2025
Course Code: ITM 211; Course Title: HCI and User Experience
Sections & Teachers: A (AR)

Time: 1:30 Hours

Marks: 25

Answer ALL Questions

[The figures in the right margin indicate the full marks. All portions of each question must be answered sequentially.]

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|-------|---|-----------|-------------------|
| 1. a) | Explain the concept of Human Computer Interaction (HCI) and User Experience (UX) with example. | [Marks-2] | CLO-1
Level-2 |
| b) | Break down the concepts of prototyping in HCI. Provide a real-life example. | [Marks-3] | CLO-1
Level-4 |
| 2. a) | Compare and contrast between formal and informal usability studies. | [Marks-2] | CLO-1
Level-4 |
| b) | Explain the different types of information input and output (I/O), including visual, auditory, haptic, and movement. | [Marks 3] | CLO-1
Level-2 |
| 3. a) | Analyze the Ponzo Illusion and the Müller-Lyer Illusion. Illustrate both illusions with diagrams. | [Marks-3] | CLO-2
Level-4 |
| b) | Describe the 3 types of memory storage in human cognition: Sensory Memory, Short-Term Memory, and Long-Term Memory with example. | [Marks-2] | CLO-2
Level-2 |
| 4. a) | You are using a smartphone and need to tap on a "Camera" app icon. Two interface designs are provided: | | |
| | <p>Design A - The icon is 8 cm away from your thumb's resting position and is 1.5 cm wide.</p> <p>Design B - The icon is 4 cm away from your thumb's resting position and is 3 cm wide.</p> | [Marks-5] | CLLO-2
Level-3 |
| | Using Fitts' Law, evaluate which design provides a better UX in terms of speed and accuracy. Justify your conclusion based on HCI principles and UX concepts. | | |
| 5. a) | Summarize the seven stages of Donald Norman's model of interaction in the context of using a university web portal to submit an online assignment. | [Marks-5] | CLO-3
Level-4 |

$a=0.1$
 $b=0.2$