COMSATS University Islamabad
ABBOTTABAD CAMPUS
MIDTERM EXAM- SPRING 2025
HUMAN COMPUTER INTERACTION

2/5/25

Class:	BSE-7A	Date:	05-May-2025
Subject:	Human Computer Interaction	Instructor:	Ahsan Riaz
Time Allowed:	1 hr. 30 min	Max Marks:	40
Student Name:		Roll no:	

Note: Attempt all questions. Cutting is not allowed. Keep the diagrams neat and readable.

SECTION-A (10 Marks)

Question 1: Identify the concept by reviewing the following statements. (CLO-1) [5 marks]

Statement	Concept
A system that responds quickly to user actions, keeping them informed of what is happening, follows which key design principle?	
Allowing users to undo an accidental action is an example of which usability concept?	
A user's understanding of how a system works based on past experiences and interface cues is referred to as?	
The ability to customize shortcuts or use expert-level commands for frequent users represents which concept?	
Arranging navigation elements in the same place on all pages of a website demonstrates which usability principle?	

Question 2: Identify the interaction types for the below mentioned scenarios. (CLO-1) [5 marks]

Statement	Interaction type
You're using voice commands to adjust your smart home lighting system while cooking in the kitchen.	
You tap and drag items on a touchscreen tablet to organize photos into albums.	
You're using a gesture-controlled interface to swipe through an image gallery in mid-air without touching any surface.	
A GPS navigation system guides your route and recalculates when you take a wrong turn, updating instructions in real-time.	
You're walking in a new city, and your smartphone's location-based app notifies you of a nearby coffee bar where your friends are meeting. You decide to join them.	

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SECTION-B (15 Marks)

Note: Attempt all questions. Cutting is not allowed. Keep the diagrams neat and readable.

Question 1: Do as directed. (CLO-2) [5 marks]

Compare qualitative and quantitative data analysis techniques within the context of evaluation methods. How do their approaches, data types, and analytical outcomes differ in achieving effective evaluation?

Question 2: For the scenario below, do the following. (CLO-2) [05 marks]

4 users use the same product to attempt to perform the same tasks (2 tasks). 3 users manage to complete it – taking 2, 4, and 6 seconds respectively. The fourth user takes 9 seconds and then gives up without completing the task.

a. Calculate time-based efficiency?

b. Calculate Overall Relative Efficiency?

Question 3: (CLO-2) [5 marks]

Scenario: You have been tasked with assisting in the creation of a new computerized call center system for the National Bank. This system will handle customer inquiries related to updating their account details. Examples of these requests include opening new accounts, closing existing ones, changing the account holder's address, and other similar updates.

Explain how you might use different data-gathering techniques to identify the potential usability problems that might arise for people working with this new system. **Justify** your answer by stating valid reasons.

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