National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Human Computer Interaction	Course Code:	CS 422
	Program:	SE (Software Engineering)	Semester:	Fall 2022
	Duration:	20 Minutes	Total Marks:	20
	Paper Date:	10-10-22	Weight	
	Section:	A	Page(s):	3
	Exam Type:	Quiz 3		

Student Name:_____   Roll No._____

Instruction/Note   Solve on question paper, no rough sheets!

Q.1 Write True/False for the following statement. State the correct statement incase of a false statement. (3)

- **information windows that pop up to inform of an important event are message windows.**

  False, Information windows that pop up to inform of an important event are dialog boxes.

- **Systems' inadequacy has no relation with a user's motivation**

  False, Systems' inadequacy cause frustration and lack of motivation

- **Menus and WIMP are common interaction styles**

  True

Q.2 Circle the correct option. There can be more than one correct choice. (3)

➔   **Menu design issues include:**
- <mark>which kind to use</mark>
- how to ungroup items
- <mark>choice of keyboard accelerators</mark>
- All of the above

➔   **False statement(s) regarding command line interface:**
- suitable for repetitive tasks
- <mark>better for novice users than experts</mark>
- offers direct access to system functionality
- None of the above

➔ **What is used to retrieve information from database :**
- Database
- Command line
- Question/answer interfaces
- <mark>Query Language</mark>

Q.3 List any four things used by Pointers. (2)

1. **Mouse**
2. **Trackpad**
3. **Joystick**
4. **Trackball**
5. **cursor keys or keyboard shortcuts**

Q.4 List any three types of button along with a visual example and short description. (6)

1. **radio buttons : set of mutually exclusive choices**

2. **check boxes : set of non-exclusive choices**

3. **dropdown button : when clicked displays a drop-down list of mutually exclusive items**

(1 mark for each relevant visual)

Q.5 What is the gulf of execution? Explain with an example. (2)

Gulf of Execution is when user's formulation of actions is not equal to the actions allowed by the system

Example : a person can look at a light switch and easily tell what the current state of the system is (i.e., whether the light is on or off) and how to operate the switch. This means that the gulf of execution is small. Norman states that, in order to design the best interfaces, the gulf must be kept as small as possible.

(Accepting other correct examples as well)

Q.6 What are the differences between office interface and industrial interface? (4)

Office interface :

- **direct manipulation**
- **user interacts with artificial world**

Industrial interface :

- **indirect manipulation**
- **user interacts with real world through interface**