National University of Computer & Emerging Sciences, Karachi
Spring CS-Department Final Exam

Course Code: CS 422	Course Name: Human Computer Interaction
Instructor Name: Mr. Behraj Khan	
Student Roll No:	Section No:

<div align="center">June 26, 2020   9:00 am – 12:00 noon</div>

- Read each question completely before answering it. There are **14 questions and 2 pages only.**

- In case of any ambiguity, you may make assumptions. But your assumption should not contradict any statement in the question paper.

- You need to prepare a pdf file of all the question as per the question ordering. The orientation should be portrait for each page. It should be clearly visible for each and every text written on the page. You suppose to upload it on slate as an assignment submission. You have good 30 minutes for it. Wish you all the best. Afterwards, email it to instructor.

- The electronic submission will be done till 12:30 pm only. No submission allowed afterwards.

Time: 180 minutes.   **Max Marks**: 70 points

Answer the following questions by drawing a window screen of your project **[5 points each]**:

1. Your instructor asked you to design a particular window screen for your semester project which can be used for registration and verification of users by using user cell number only.How recognition or recall will be used in this particular scenario? Explain the difference between the two.

2. For user verification your app sends a verification code and asks the user to wait about 15 or 20 seconds and the timer also starts. Describe which principle of direct manipulation can be used and justify your answer. Give one other general example of this principle.

3. If your instructor asked you to facilitate users by allowing registration and verification using email id or cell number. So which of the design principle will be used in this scenario, rationalize your response by considering the mentioned hint use-case only.(hint: email id or cell number).

4. How can task migratability be implemented in your designed app to facilitate user. Rationalize by drawing a screen

5. How the gulf of evaluation can be minimized for the screen designed in **Q4**?
If you are asked to apply wizard of OZ prototyping technique for above mentioned screen, how would you apply it?

6. Before starting the implementation of your project you are thinking the type of reasoning to be used in your semester project. So after brainstorming what will be your chosen type of reasoning that will be used in your semester project. Rationalize

7. Sir. Behraj Khan give you a project in which you are asked to design the new version of computer game. The 1st version of this game was released by the company and most of the people purchased that version but they quickly abandoned it. Now your only task is to write a technical note in which you explain the difficulties of lab-based tests to explain this problem.

8. You implemented your project and it is ready for deployment, you asked some of the members of your team for evaluating the mentioned screen in **Q1** only of the app. As in this experimental study for evaluation what will be your dependent and independent variables? What is the basic difference among between-subjects and within-subjects experimental methods.

9. Write down your semester project title,members names, and rationalize that how you implemented task adequacy and task conformance in your project with the help of a screen each.

10. Eventual honesty and immediate honesty the concepts which we have discussed before mid-term 1 in class. How can both be implemented in your semester project, rationalize with a screen for each? Rationalize about the type of users who can chose among the mentioned features

11. If you are unable to natural mappings in your semester project then which Norman's principle can be used.

12. Cognitive psychology is one of the interdisciplinary field of your subject. How did it helped in implementing the project? How it helped in designing phase from user perspective?

13. Formulate the scenario mentioned in **Q1** into Norman's interaction model.

14. What is the importance of usability standards from your project perspective? Rationalize each.

********** ********** Best of Luck********** **********