National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Human Computer Interaction	**Course Code:**	CS-2007
	Degree Program:	BS-SE	**Semester:**	Fall 2022
	Exam Duration:	60 Minutes	**Total Marks:**	35
	Paper Date:	27-09-2022	**Weight**	15
	Section:	ALL	**Page(s):**	4
	Exam Type:	Midterm-I		

Student : Name:_____ **Roll No.**_____ **Section:**_____

Instruction/Notes: Attempt all questions. Your answers should be precise and to the point. Use the given space only. Extra sheets not allowed. Avoid cutting or overwriting. Programmable calculators are not allowed.

Q 1. List down any **5** features from Microsoft Word that a system does to minimize the memory load for the user? (5 marks)

1._____Search option_(Find and replace)_____
2._____Auto correct grammar and spelling_____
3._____Recent Documents_____
4._____Display word count_____
5._____Default layouts,Icons for varies options_____

Q 2. List down any **FOUR** factors that can limit the speed of an interactive system (4 marks).

1.__Computation Bound_____
2.__Storage Channel Bound_____
3.__Graphic Bound_____
4.__Network Capicity_____

Q3. What do you think if you have high- performance computers/mobile phones and good network connections you would have an ideal interaction with computer? If not give two reasons (3 marks)

_____No_____
_____
_____

Q4. Write down three examples of hardware which can be used to enter English text in a computer/device. (3 marks)

1. _____Mouse_____

2. _____Keyboard_____

3. _____Touch Screen_____

Q5 List two advantages and two disadvantages of Speech Recognition System (5 marks)

Advantages:

- Talking is much faster than typing
- Useful for any hand injury

_____

_____

Disadvantages

_____Accent Issue, multitasking, Same words but different meaning_____

_____Interference of external voices, Difference of pronunciation._____

Q 6. Describe five types of cognitive process explaining how they can result in human error when using a computer system (5 marks).

1.__

Attention – miss call to action
Perception and recognition – miss features e.g. navigation
Memory – forget navigation to key information
Learning – failure to understand software
Problem-solving, planning, reasoning and decision-making – make wrong inferences about
software processes

Q7. Write the appropriate option (10 marks)

1	C	6	B
2	A	7	B
3	A	8	D
4	A	9	B
5	D	10	B

1. **Statement 1**

   Speech technology is a small area of commercial interest.

   Statement 2

   Courier is a fixed-pitch font (1 mark)

   a) Only Statement 1 is True
   b) Only Statement 2 is True
   c) Both statements are True
   d) Both statements are False

2. Why are people less able to distinguish fine detail in blue? (1 mark)

   a) There are fewer cones in the center of the retina that are sensitive to blue light
   b) There are more cones in the center of the retina that are sensitive to blue light

3. Over a short period of time, we find it easier to remember the string of numbers "404 894 6743" because: The grouping of the numbers is significant. (1 mark)

   a) TRUE
   b) FALSE

4. The amount of light emitted by an object is called_____ (1 mark)

   a) Luminance
   b) Intensity
   c) Hue
   d) Saturation

5. Which among the below options is not an interdisciplinary field of HCI? (1 mark)

   a) Cognitive Psychology
   b) Ergonomics
   c) Design
   d) Civil

6. Optical character recognition converts? (1 mark)

a) texts into speech
b) image into text
c) virtual reality into text
d) documents into text

7. When we input text to the computer via on-screen keyboard on a monitor, the input device is: (1 mark)

   a) the keyboard
   b) the mouse
   c) the hand
   d) the screen

8. Which one the following is highly sensitive to light and allows to see under a low level of illumination (1 mark)

   a) Cones
   b) X-cells
   c) Y- cells
   d) Rods

9. ___ is generalizing from cases we have seen to infer information about cases we have not seen.(1 mark)

   a) Deductive reasoning
   b) Inductive reasoning
   c) Abductive reasoning
   d) Reasoning

10. What is a semantic network?(1 mark)

   a) A model of short-term memory
   b) A model of long-term memory
   c) A model of physical memory
   d) A model of short and long-term memory