Name:

**Enrolment No:** 



## UPES End Semester Examination, May 2023

Course: Introduction to UI/UX Program: B.Tech, CSE (G&G) Course Code: CSGG2006

Semester: IV Time: 03 hrs. Max. Marks: 100

Instructions: Attempt all the questions. Q. No. 9 has internal choice. Internal choice is implicit in Q. No. 11.

SECTION A (50x4M=20Marks)				
S.N.		Marks	CO	
Q 1	State the interpretation of a good design. Give examples of two generic designs that you consider good. Justify.	4	CO1	
Q 2	It's a general assumption that curvature typically adds on to design aesthetics. Quote two design scenarios where curves on surfaces or edges may not be desirable.	4	C01	
Q 3	Conversation and navigation are two interaction types. Suggest one interface each for the two interactions and convey how they would accomplish it.	4	CO2	
Q 4	Define a metaphor. Brief how does it contribute to conceptualization.	4	CO2	
Q 5	Give two examples each for the questions based on Likert and semantic differential scales for preparing any questionnaire.	4	CO3	
	SECTION B (4Qx10M= 40 Marks)			
Q 6	<ul> <li>(a) Define Cognitive science, anthropology, and ergonomics and relate these areas to the interaction design.</li> <li>(b) List any four generic contributors to the process of interaction design and discuss their roles.</li> </ul>	10	CO1	
Q 7	(a) Discuss and differentiate among stakeholder maps, empathy maps, and scenario maps used in the interaction design process.	10	CO2	
	(b) List the core components of a conceptual model.			
Q 8	<ul> <li>(a) Discuss the types of interviews. Draft an interview for assessing an educational 2D game.</li> <li>(b) Design a sample questionnaire comprising of five questions for an eatables delivery app.</li> </ul>	10	CO2	

(a) Explain the three basic steps in qualitative analysis.	10	CO3
(b) Discuss conversation analysis and discourse analysis.		
OR		
<ul> <li>Give short notes on the interfaces given below. The notes must address following points:</li> <li>The way these interfaces operate.</li> <li>Current usage/state-of-art</li> <li>Problems or drawbacks witnessed so far and the research avenues.</li> </ul>	10	СОЗ
<ul> <li>(a) (Product Enhancement) By means of a storyboard, depict the way the user experience associated with any non-digital design can be enhanced. You may pick any one of the two; a whiteboard in a classroom/ a sleeping bed. The design can be enhanced digitally or non-digitally.</li> <li>(b) (UI enhancement) Sketch a wireframe for a cellphone app UI that records employee biometrics for routine attendance. While the attendance is bound to a specific physical location, it is also tied to fingerprint and retinal identification of the employee. In addition to attendance maintenance, other employee records, e.g., previous attendance record, leave statistics, payroll, etc. are also maintained. Accommodate the facilities within two-three frame sketches.</li> </ul>	10, 10	CO2
<ul> <li>Consider the following application scenarios: <ul> <li>A cellphone app for differently abled</li> <li>A cellphone app for a 2D/3D game enthusiast</li> <li>A cellphone app towards designing plant/leaf identification system for a curious botanical park or garden visitor</li> </ul> </li> <li>For any one of the three scenarios mentioned above, introduce user-experience in the loop by addressing following points in your answer: <ul> <li>(a) Draft an interview/questionnaire or their mix.</li> <li>(b) Prepare an empathy map or persona derived from the data gathering insights.</li> <li>(c) Wireframe the UI for the app to incorporate user feedback.</li> </ul> </li> <li>In all the application cases, intricacies can be suitably assumed.</li> </ul>	20	CO3
	<ul> <li>(b) Discuss conversation analysis and discourse analysis.</li> <li>OR</li> <li>Give short notes on the interfaces given below. The notes must address following points: <ul> <li>The way these interfaces operate.</li> <li>Current usage/state-of-art</li> <li>Problems or drawbacks witnessed so far and the research avenues.</li> </ul> </li> <li>Interfaces: Natural User Interfaces, touch-based input, and Virtual Reality.</li> <li>SECTION-C (2Qx20M=40 Marks)</li> </ul> <li>(a) (Product Enhancement) By means of a storyboard, depict the way the user experience associated with any non-digital design can be enhanced. You may pick any one of the two; a whiteboard in a classroom/ a sleeping bed. The design can be enhanced digitally or non-digitally.</li> <li>(b) (UI enhancement) Sketch a wireframe for a cellphone app UI that records employee biometrics for routine attendance. While the attendance is bound to a specific physical location, it is also tied to fingerprint and retinal identification of the employee. In addition to attendance maintenance, other employee records, e.g., previous attendance record, leave statistics, payroll, etc. are also maintained. Accommodate the facilities within two-three frame sketches.</li> <li>Consider the following application scenarios: <ul> <li>A cellphone app for differently abled</li> <li>A cellphone app towards designing plant/leaf identification system for a curious botanical park or garden visitor</li> </ul> </li> <li>For any one of the three scenarios mentioned above, introduce user-experience in the loop by addressing following points in your answer: <ul> <li>(a) Draft an interview/questionnaire or their mix.</li> <li>(b) Prepare an empathy map or persona derived from the data gathering insights.</li> <li>(c) Wireframe the UI for the app to incorporate user feedback.</li> </ul> </li>	(b) Discuss conversation analysis and discourse analysis.       10         (b) Discuss conversation analysis and discourse analysis.       10         (c) OR       10         Give short notes on the interfaces given below. The notes must address following points:       10         • The way these interfaces operate.       10         • Current usage/state-of-art       10         • Problems or drawbacks witnessed so far and the research avenues.       10         Interfaces: Natural User Interfaces, touch-based input, and Virtual Reality.       10         (a) (Product Enhancement) By means of a storyboard, depict the way the user experience associated with any non-digital design can be enhanced. You may pick any one of the two; a whiteboard in a classroom/ a sleeping bed. The design can be enhanced digitally or non-digitally.       10, 10         (b) (UI enhancement) Sketch a wireframe for a cellphone app UI that records employee biometrics for routine attendance. While the attendance is bound to a specific physical location, it is also tied to fingerprint and retinal identification of the employee. In addition to attendance maintenance, other employee records, e.g., previous attendance record, leave statistics, payroll, etc. are also maintained. Accommodate the facilities within two-three frame sketches.       20         Consider the following application scenarios:       - A cellphone app for a 2D/3D game enthusiast       - A cellphone app to differently abled       - A cellphone app to may designing plant/leaf identification system for a curious botanical park or garden visitor       20