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# Question Paper Code: 20432

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2023.

#### Fifth Semester

## Computer Science and Design

### CCS 370 - UI AND UX DESIGN

(Common to: Computer Science and Engineering/Computer Science and Engineering (Artificial Intelligence and Machine Learning)/computer Science and Engineering (Cyber Security)/Computer and Communication Engineering/Artificial Intelligence and Data Science and Information Technology)

(Regulations 2021)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

- 1. Define the meaning of design from the perspective of usefulness for many design disciplines.
- 2. What is Brainstorming?
- List out UI design elements.
- 4. State any 2 ways to implement branding into the UX design process.
- 5. Why should you care about user experience?
- 6. Mention the tools used for user experience design.
- 7. Write the importance of wireframing and prototyping in UI/UX design.
- 8. How will you perform usability testing?
- 9. Formulate the steps involved in a persona creation process.
- 10. What is a flow diagram?

# PART B - (5 × 13 = 65 marks)

11.	(a)	(i)	List the standards for empathy interviewing and explain. (5)
		(ii)	Explain core stages of the design thinking process. (8)
			$\mathbf{Or}$
	(b)		scribe two modes of thinking that designers use to widen their design ce and analyze potential solutions.
12.	(a)	(i)	With a suitable example illustrate the mapping of interview subjects to behavioral variables. (6)
		(ii)	Outline the major categories of principles that operate at different levels in an interaction design. (7)
			$\mathbf{Or}$
	(b)		cuss the importance of UI style guide and also explain the risks of king without a UI style guide. $(6 + 7 = 13)$
13.	(a)	(i)	With diagrams, outline the five elements (planes) of User Experience design. (10)
		(ii)	Discuss the user needs and the goals in UX design. (3)
			Or
	(b)	Illus	strate the tools and methods used for research in User Experience
		desi	gn. (13)
14.	(a)	<b>(i)</b>	Compare wireframing, prototyping and mock-ups used in UX design. (7)
		(11)	
			Describe the creation process of UX user interaction patterns. (6)
			$\mathbf{Or}$
	(b)	(i)	Illustrate the stone to purposely conthesion and the stone to purposely control and the stone to purposely conthesion and the stone to purposely conthesion and the stone to purposely conthesion and the stone to purposely control and the stone to purpose to p
			Illustrate the steps to properly synthesize your usability test findings in UX design. (7)
		(ii)	
			Briefly explain how the prototype used iteratively to get user's feedback. (6)

15. (a) Bring out the various phenomena captured by a work-flow model in user interface design. (13)Oi · (b) Illustrate the identification of appropriate research methods for (i) UI/UX design problems. With a neat diagram, explain the information architecture for (ii)UI/UX design. (6)PART C —  $(1 \times 15 = 15 \text{ marks})$ 16. (a) Create your own gamestorming ideation téchnique and also explain (i) the creation of unified brand identity. (ii) Create a Sample Pattern Library for a Product. (7)Or(b) Designing a web page is one of the easiest task today. With suitable

example. design a UI/UX design for web page.