**Printed Page:-03** Subject Code:- BCSE0203 Roll. No: NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA (An Autonomous Institute Affiliated to AKTU, Lucknow) **B.Tech** SEM: II - THEORY EXAMINATION - (2023- 2024) Subject: Design Thinking-I **Time: 2 Hours** Max. Marks: 50 **General Instructions: IMP:** *Verify that you have received the question paper with the correct course, code, branch etc.* 1. This Question paper comprises of three Sections -A, B, & C. It consists of Multiple Choice *Questions (MCQ's) & Subjective type questions.* **2.** *Maximum marks for each question are indicated on right -hand side of each question.* **3.** *Illustrate your answers with neat sketches wherever necessary.* **4.** Assume suitable data if necessary. **5.** *Preferably, write the answers in sequential order.* 6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked. SECTION A 15 1. Attempt all parts:-Design thinking is often also called . (CO1) 1-a. 1 (a) Intellectual property (b) Human Centred design (c) Ecological sustainability (d) Alien diversity 1-b. "To be assured that each human being inherently wants oneself and the other 1 to be happy and prosperous" is known as \_\_\_\_\_\_. (CO2)

- (a) trust
- (b) respect
- (c) glory
- (d) reverence
- 1-c. In the\_\_\_\_\_ stage you synthesise your observations about your users from 1 the first stage, the Empathise stage. (CO3)

- (b) Ideate
- (c) Prototype
- (d) Test
- 1-d. The statements (reasons) given in support of another statement are 1 called...(CO4)
  - (a) An argument
  - (b) The conclusion
  - (c) The premises
  - (d) The complement
- The statement which is supported by another statement is 1-e. 1 called (CO5)
  - (a) An argument
  - (b) The conclusion
  - (c) The premises
  - (d) The complement

## 2. Attempt all parts:-

	(b) The conclusion		
	(c) The premises		
	(d) The complement		
2. Attempt all parts:-			
2.a.	Why is design thinking called a non-linear process? (CO1)	2	
2.b.	Discuss the relationship between body and self.(CO2)	2	
2.c.	What does Green hat represents? (CO3)	2	
2.d.	Compare argumentation versus rhetoric.(CO4)	2	
2.e.	Discuss the method to know whether an argument is valid or invalid. (CO5)	2	
	SECTION B	15	

# 3. Answer any three of the following:-

- Give any 2 instances of importance of listening over hearing. Illustrate with real 3-a. 5 time examples. (CO1)
- 3-b. What do you understand by stakeholder mapping? Assume you are planning to 5 start a business using Coconut Shells, make a list of stakeholders using CATWOE analysis. (CO2)
- How Persona mapping play an important role in understanding customers? 3.c. 5 Assume you are CEO of a home safety company, draw the persona of a survivor of Fire accident. (CO3)
- 3.d. Explain various cognitive bias in critical thinking. (CO4)
- 5 3.e. Describe the logic. Also differentiate between premise and conclusion. (CO5)

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### SECTION C

## 4. Answer any one of the following:-

- 4-a. Describe 5 forces of growth. How it helped you to become better version of 4 yourself? (CO1)
- 4-b. What are 3 laws of Design Thinking? Apply them to suggest an idea to make a 4 Job search Portal. (CO1)

## 5. Answer any one of the following:-

- 5-a. What Are the 5 Levels of Maslow's Hierarchy of Needs? (CO2) 4
- 5-b. What do you understand with Empathy? How it helps you making good friends? 4 (CO2)

## 6. Answer any one of the following:-

- 6-a. How effective brainstorming session can be conducted? Brainstorm individually 4 to produce 20 ideas to design a home energy management app. (CO3)
- 6-b. Describe Edward de Bono's six thinking hats. Assume yourself as selector of 4 Indian Cricket Team apply 6 thinking hats to select an allrounder for 6th position. (CO3)

## 7. Answer any one of the following:-

7-a.	Discuss the pillars of critical thinking.(CO4)	4	
7-b.	Elaborate Bandwagon Effect and Choice-supportive Bias with example. (CO4)	4	
8. Answer any <u>one</u> of the following:-			
8-a.	Contrast between deductive reasoning and inductive reasoning. (CO5)	4	
8-b.	Determine Straw Man fallacy and Bandwagon fallacy. (CO5)	4	