NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)
B.Tech
SEM: II - THEORY EXAMINATION (2024- 2025)
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:-

1-a.   When multiple knowledge clusters converge above the plane is called _____ .   1
         (CO1,K1)

   (a)   Alignment

   (b)   Perspective

   (c)   Idea

   (d)   None of the above

1-b.   The feeling of acceptance of excellence in the other is called _____. (CO2,K1)   1

   (a)   guidance

   (b)   reverence

   (c)   respect

   (d)   glory

1-c.   Journey map is best defined as. (CO3,K1)   1

   (a)   It is a map to locate where the customer has travelled

   (b)   This only applies to the travel industry, since it involves maps

   (c)   It is a typical journey of a customer who goes through a certain experience

   (d)   The map that leads us to a profit making enterprise

1-d.   An effective _____ must be able to relay his or her ideas in a compelling way   1
         and then absorb the responses of others (CO4,K1).

   (a)   Design Thinkers

     (b)   Critical Thinkers

     (c)   Creative thinkers

     (d)   None of the above

1-e.   This fallacy assumes that a compromise between two extreme conflicting points is always true. Which fallacy does it refer? (CO5,K1)   1

     (a)   The Middle Ground Fallacy

     (b)   The Burden of Proof Fallacy

     (c)   The Texas Sharpshooter Fallacy

     (d)   The Correlation/Causation Fallacy

2. Attempt all parts:-

2.a.   Explain perspective element of SEPIA. (CO1,K4)   2

2.b.   Define diversity in reference to ethical behaviour.(CO2,K1)   2

2.c.   What does White hat represents? (CO3,K1)   2

2.d.   Define Incongruence with Example.(CO4,K1)   2

2.e.   How does logic differ from critical thinking? (CO5,K1)   2

SECTION-B   15

3. Answer any <u>three</u> of the following:-

3-a.   Illustrate 2 examples of power of observation and how it can help undertsanding a problem. Give real time examples. (CO1,K3)   5

3-b.   Discuss the agents of Socialization.(CO2,K1)   5

3.c.   Attempt a journey map of a first-year student who comes from a rural background and enters your classroom. Draw the persona and Identify various touch points. Capture journey map elements at each touch point and rate them by plotting a graph. (CO3,K1)   5

3.d.   Discuss in detail the pillars of critical thinking. (CO4,K1)   5

3.e.   Elaborate the role of critical thinking in scientific reasoning with example. (CO5,K1)   5

SECTION-C   20

4. Answer any <u>one</u> of the following:-

4-a.   What is Design Culture? What does it include? (CO1,K1)   4

4-b.   Difference between Lean Thinking and Critical Thinking. (CO1,K1)   4

5. Answer any <u>one</u> of the following:-

5-a.   Examine and write about yourself as co-existence of self and body. (CO2,K1)   4

5-b.   Differentiate between the culture of start-up and established corporate.(CO2,K1)   4

6. Answer any <u>one</u> of the following:-

6-a.   Describe the steps of Personas. (CO3,K1)   4

6-b.   Describe Edward de Bono's six thinking hats and explain their role in problem solving. (CO3,K1)   4

7. Answer any <u>one</u> of the following:-

7-a.	Demonstrate tribalism and give any example related to it. How it is handled by critical thinking? (CO4,K3)	4
7-b.	Distinguish various types of cognitive biases. (CO4,K1)	4

8. Answer any <u>one</u> of the following:-

8-a.	Differentiate between simple and compound statement? (CO5,K1)	4
8-b.	Discuss the significance of argument and statement in design thinking. (CO5,K1)	4