Subject Code:- **AMCA0205**

Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)
MCA
SEM: II - THEORY EXAMINATION (2023 - 2024)
Subject: Design Thinking

Time: 3 Hours   **Max. Marks: 100**

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   20

1. Attempt all parts:-

1-a.   Design Thinking is: (CO1)   1

   (a)   Thinking about design

   (b)   Designing ways in which people think

   (c)   Defining, framing and solving problems from users' perspectives

   (d)   Asking users to solve problems

1-b.   The Empathize phase deals with: (CO1)   1

   (a)   Fine tune products or services till they are no more bugs in them

   (b)   Get in the shoes of the customers and understand the situation from their perspective

   (c)   Interviewing people to get their opinions, feedback and shortcomings of your current product/service

   (d)   Prototype a concept and check if it stands the test of the market

1-c.   ___ may be geometric (square, circle, etc) or organic (free form). They are flat and   1
       can express length and width. (CO2)

   (a)   Shapes

   (b)   Value

   (c)   Intensity

   (d)   Texture

1-d.   _____occurs when all of the elements combine to make a balanced,   1
       harmonious, complete WHOLE. (CO2)

(a)   Rhythm

(b)   Emphasis

(c)   Unity

(d)   Contrast

1-e.   Strong …………………………….. means you have a high sense of moral and ethical behavior that earns respect of others. (CO3)   1

(a)   Cooperation

(b)   Confidence

(c)   Attitude

(d)   Character

1-f.   A good problem statement should have the following traits: (CO3)   1

(a)   Human-centered

(b)   Broad enough for creative freedom

(c)   Narrow enough to make it manageable

(d)   All of the above

1-g.   What is definition of Critical Thinking? (CO4)   1

(a)   Disciplined thinking and judgement.

(b)   When you feel sorry for someone else's thinking.

(c)   The ability to know what someone else is thinking.

(d)   None of the above.

1-h.   A belief is worth accepting if: (CO4)   1

(a)   We have good reasons to accept it

(b)   It is consistent with our needs

(c)   It has not been proven wrong

(d)   It is accepted by our peers

1-i.   Steps for critical-thinking skill development involve. (CO5)   1

(a)   looking at things differently

(b)   analyzing information

(c)   solving problems

(d)   All of the above

1-j.   Choose the best answer to fill in the blank: _____ can be seen as self-centered thinking or self-interested thinking. (CO5)   1

(a)   Sociocentrism

(b)   Egocentrism

(c)   Wishful Thinking

(d)   Relativistic thinking

2. Attempt all parts:-

2.a.   Define Design Thinking. What are different perspective of Design Thinking   2

definition? (CO1)

2.b.	Describe the difference between desires and actualization. (CO2)	2
2.c.	Differentiate between simple and compound statement? (CO3)	2
2.d.	What do you understand by the term logical fallacy and describe it briefly? (CO4)	2
2.e.	Describe Logical reasoning in brief. (CO5)	2

SECTION-B   30

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

3-a.	Why is design thinking called a non-linear process? (CO1)	6
3-b.	What is the difference between Design Thinking and Design? (CO1)	6
3-c.	What do you understand by empathizing with others? (CO2)	6
3-d.	Define the aboriginal culture. (CO2)	6
3.e.	Differentiate between Valid and invalid arguments. (CO3)	6
3.f.	What is the limitations between Science and Technology? (CO4)	6
3.g.	Explain Role play with suitable example. (CO5)	6

SECTION-C   50

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

4-a.	Explain Wicked Problem with suitable example. (CO1)	10
4-b.	What's the impetus for exploring design thinking? (CO1)	10

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

5-a.	In CATWOE Analysis C stands for customer? Explain. (CO2)	10
5-b.	Can design thinking work with any age? (CO2)	10

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

6-a.	Write Short note on 6 thinking hats? A coffee store is experiencing decline in orders due to delay in ordering process. Apply 6 thinking hats to understand the problem. (CO3)	10
6-b.	What do you understand with 6 Thinking Hats? Explain 6 thinking Hats with example. (CO3)	10

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

7-a.	Discuss and Analyze any case study involving critical thinking. (CO4)	10
7-b.	What is the limitations between an argument and an explanation? (CO4)	10

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

8-a.	What does the process of design thinking look like? How would you guide someone through the process? (CO5)	10
8-b.	Give general steps of design thinking for designing a Public Announcement system for a company. (CO5)	10