NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU. Lucknow)

M. Tech (Integrated)

SEM: V - THEORY EXAMINATION (2022 - 2023)

Subject: Design Thinking-II

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.

<div align="center">SECTION A   20</div>

1. Attempt all parts:-

1   Six Key Steps to a Design Thinking Mindset involves: (CO1)   1

                 (a) Frame a Question

                 (b) Gather Inspiration

                 (c) Generate Ideas

                 (d) All of the above

1   Design mind is having a_____ mindset. (CO1)   1

                 (a) 3-Dimensional

                 (b) 2-Dimensional

                 (c) 1-Dimensional

                 (d) X-Dimensional

1   Ideation methods are: (CO2)   1

                 (a) Braindump

                 (b) Provocation

                 (c) Storyboard

(d) All of the above

1   T in SWOT refers to (CO2)   1

     (a) Tiny

     (b) Topic

     (c) Threat

     (d) None of the above

1   Alpha and beta testing are type of…......... (CO3)   1

     (a) user acceptance testing

     (b) sampling methods

     (c) both (1) and (2)

     (d) none

1   If the null hypothesis is false then which of the following is accepted? (CO3)   1

     (a) Null Hypothesis

     (b) Statistical Hypothesis

     (c) Alternative Hypothesis

     (d) Composite Hypothesis

1   A management technique used for improving the efficiency and performance of the workgroups through various activities is: (CO4)   1

     (a) Team building

     (b) Organizational dynamics

     (c) Performance evaluation

     (d) None of these

1   In DMAIC, "C" stands for: (CO4)   1

     (a) Control

     (b) Compare

     (c) Collect

     (d) Confirm

1   When you move information from the hidden self into the open self, you're (CO5)   1

     (a) empowering

     (b) Self-disclosing.

     (c) depressed.

(d) affirming.

1   Which is NOT a reason why people join group? (CO5)   1

(a) Knowledge

(b) Status

(c) Safety

(d) Power

2. Attempt all parts:-

2.a.   List the Five Stages of Design Thinking. (CO1)   2

2.b.   Discuss 10-100-1000 gm law of design thinking. (CO2)   2

2.c.   Define Systematic Random Sampling (CO3)   2

2.d.   Enumerate at least four business leaders from different industries who have changed the   2
         opinion business. (CO4)

2.e.   Explain Myers-Briggs Personality Type Indicator. (CO5)   2

SECTION B   30

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

3   Discuss Creativity and Innovation. (CO1)   6

3   How does the Aravind Eye Care work. (CO1)   6

3   Explain the tools used for prototyping in design thinking. (CO2)   6

3   Discuss convergent thinking in design thinking. (CO2)   6

3.e.   Persona mapping is a key element of storytelling. Explain in detail. (CO3)   6

3.f.   "Innovation comes at a cost." Explain with your reason. (CO4)   6

3.g.   Write short note on FIRO-B Test. (CO5)   6

SECTION C   50

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

4-a.   Summarize DBS Singapore and Bank of Americas' Keep the Change Campaign. (CO1)   10

4-b.   Elaborate 3 core design principles. (CO1)   10

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

5   Explain SWOT analysis with suitable example. (CO2)   10

5   How can we apply the concept of the design thinking in a real life . Justify the statement   10
         with an example.(CO2)

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

6	Describe proactive, reactive and ongoing methods of user feedback. (CO3)	10
6	Define usability testing? Explain remote and in person testing methods. (CO3)	10

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

7	Suggest the changes you would like to implement as a leader to bring harmony among the employees of your company. (CO4)	10
7	Describe the Belbin's model of Team roles. Describe various team roles also. (CO4)	10

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

8	Design the MBTI chart as per the real problem of your choice. (CO5)	10
8	Define and link all the 5 dimensions of the human order. (CO5)	10