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NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)

MCA Integrated

SEM: IV - THEORY EXAMINATION (2025 - 2026)

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.

SECTION-A

20

1. Attempt all parts:-

- | | | |
|-------|--|---|
| (1.1) | Use the _____ tool to assess your level of satisfaction or creative fulfillment in each area of your life. (CO1, K1) | 1 |
| (a) | wheel of life assessment | |
| (b) | RCA | |
| (c) | Brainstorming | |
| (d) | None of the above | |
| (1.2) | Cartographer refers to _____. (CO1, K6) | 1 |
| (a) | An Entire Perspective Mindset | |
| (b) | Expertise Mindset | |
| (c) | Interrogative Mindset | |
| (d) | Critical mindset | |
| (1.3) | State the full form of MVP in the context of prototyping. (CO2, K1) | 1 |
| (a) | Most Valuable Person | |
| (b) | Maximum Viable Product | |
| (c) | Minimum Viable Prototype | |
| (d) | Minimum Visible Price | |
| (1.4) | Sketching is a form of:(CO2, K1) | 1 |
| (a) | High-fidelity prototyping | |
| (b) | Low-fidelity prototyping | |
| (c) | Final production | |
| (d) | Value proposition | |

- (1.5) Which of the following is not an Aristotle's element of storytelling? (CO3, K2) 1
- (a) Insights
 - (b) Decor
 - (c) Spectacle
 - (d) Melody
- (1.6) Taguchi's method also known as... (CO3, K1) 1
- (a) user acceptance testing
 - (b) user interface model
 - (c) robust design methods
 - (d) all of the above
- (1.7) Small changes that increase the efficiency of your current business model is: (CO4, K1) 1
- (a) Incremental innovation
 - (b) Expansive innovation
 - (c) Disruptive innovation
 - (d) None of these
- (1.8) Concept of DRIFT in quality was developed by: (CO4, K1) 1
- (a) Shigeo Shingo
 - (b) Feigenbaum
 - (c) Philip Crosby
 - (d) Shewhart
- (1.9) Which among the following is not need of Body? (CO5, K2) 1
- (a) Food
 - (b) Respect
 - (c) House
 - (d) Water
- (1.10) What response is not given by self? (CO5, K2) 1
- (a) Knowing
 - (b) Assuming
 - (c) Walking
 - (d) Recognizing

2. Attempt all parts:-

- (2.1) Describe the story behind McDonald's milkshake. (CO1, K1) 2
- (2.2) List three low-fidelity prototyping tools and explain when to use them. (CO2,K2) 2
- (2.3) Define systematic random sampling (CO3, K1). 2
- (2.4) Discuss incremental innovation with example of mobile phone. (CO4, K2) 2
- (2.5) Explain 4 orders of nature (CO5, K3) 2

SECTION-B

30

Answer any one of the following:-

- (3.1) Elaborate how Taiichi Ohno described the 5-WHY's. (CO1, K1) 6

(3.2)	Elaborate Keep the Change campaign by Bank of America, how it help them to increase the user? (CO1, K1)	6
Answer any one of the following:-		
(3.3)	Analyze how the Vroom-Yetton Matrix assists in decision-making for product features. (CO2,K4)	6
(3.4)	Contrast Paper Models with Physical Mockups in terms of cost and feedback quality. (CO2,K4)	6
Answer any one of the following:-		
(3.5)	Create persona of an bollywood actor with Autocratic Leadership style.(CO3, K1)	6
(3.6)	Describe the advantages of guerrilla interview (CO3, K2)	6
Answer any one of the following:-		
(3.7)	Explain methods to increase perceived product value (CO4, K4).	6
(3.8)	Describe the benefits of situational leadership (CO4, K3).	6
Answer any one of the following:-		
(3.9)	Explain FIRO-B test, it's needs & dimensions (CO5, K2)	6
(3.10)	Elaborate Johari window and its four quadrants. (CO5, K3)	6
SECTION-C		50
4. Answer any <u>one</u> of the following:-		
(4.1)	Analyze "The Golden Circle" with help of Apple example. (CO1, K3)	10
(4.2)	Justify the working model of Aravind Eye Care, how it is profitable even being the low cost. (CO1, K4)	10
5. Answer any <u>one</u> of the following:-		
(5.1)	Compare and contrast the 10gm, 100gm, and 1000gm ideas in the selection process.(CO2,K4)	10
(5.2)	Develop a 'Napkin Pitch' for a new mobile application concept. (CO2,K5)	10
6. Answer any <u>one</u> of the following:-		
(6.1)	Differentiate qualitative and quantitative testing (CO3, K4)	10
(6.2)	Difference between alpha and beta testing (CO3, K4)	10
7. Answer any <u>one</u> of the following:-		
(7.1)	Explain the concept of KAIZEN, with example (CO4, K2).	10
(7.2)	Describe bureaucratic leadership style (CO4, K3).	10
8. Answer any <u>one</u> of the following:-		
(8.1)	Outline the Maslow hierarchy of Human needs. (CO5, K3)	10
(8.2)	Explain the five dimensions of human endeavour. (CO5, K3)	10