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NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU, Lucknow)

B.Tech

SEM: V - THEORY EXAMINATION (2024 - 2025)

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-a. The wheel of life was originated in the _____ as a business and life coaching tool, but has evolved over the years as more people have used it and applied it. (CO1,K1)

1

- (a) 1970's
- (b) 1960's
- (c) 1980's
- (d) 1990's

1-b. McDonald's found: (CO1,K2)

1

- (a) A disproportionate number of milkshakes were sold before 8:00 a.m.
- (b) The people who bought milkshakes were almost always alone.
- (c) They almost never bought anything other than a milkshake.
- (d) All of the above

1-c. Brainstorming rules includes: (CO2,K1)

1

- (a) Time limit
- (b) Topic focussed
- (c) No criticism
- (d) All of the above

1-d. Convergent thinking can be examined through which lenses- (CO2,K1)

1

- (a) Desirability

- (b) Viability
 - (c) Feasibility
 - (d) All of the above
- 1-e. Different classes of random sampling method are..... (CO3,K1) 1
- (a) simple, systematic, stratified, clustered
 - (b) simple, complex, stratified, clustered
 - (c) simple, systematic, longitudinal, clustered
 - (d) uniform, systematic, stratified, clustered
- 1-f. Guerrilla Interviews are all about..... (CO3,K2) 1
- (a) meeting in a boardroom
 - (b) both (1) and (2)
 - (c) meeting online
 - (d) meet people at public spaces
- 1-i. The more you perceive a situation as one in which others will evaluate you, the greater your _____ will be. (CO5,K3) 1
- (a) self-awareness
 - (b) unpredictability
 - (c) self-disclosure
 - (d) apprehension
- 1-g. Tuckman propounded the model for: (CO4,K2) 1
- (a) Group behaviour
 - (b) General management
 - (c) Effective communication
 - (d) Team building
- 1-j. Which is NOT a reason why people join group? (CO5,K1) 1
- (a) Knowledge
 - (b) Status
 - (c) Safety
 - (d) Power
- 1-h. Number of errors per million opportunities under Six Sigma is: (CO4,K1) 1
- (a) 4,4
 - (b) 3,4
 - (c) 8,4
 - (d) 9,4

2. Attempt all parts:-

- 2.a. List the Five Stages of Design Thinking. (CO1,K2) 2
- 2.b. Differentiate between mind mapping and journey mapping. (CO2,K2) 2
- 2.c. Give at least two significance of testing. (CO3,K1) 2

- 2.d. Enumerate at least four business leaders from different industries who have changed the opinion business. (CO4,K2) 2
- 2.e. Explain Manah paryaya or telepathic knowledge. (CO5,K1) 2

SECTION-B

30

3. Answer any five of the following:-

- 3-a. Discuss Creativity and Innovation. Justify with an example(CO1,K2) 6
- 3-b. Illustrate the case study on Gillette and its impact on the sales of the product. (CO1,K2) 6
- 3-c. Explain the role of the Vroom Yetton Matrix in refinement and prototyping . (CO2,K2) 6
- 3-d. Enumerate the importance of the LDO in You me Health Story . (CO2,K2) 6
- 3.e. Persona mapping is a key element of storytelling. Explain in detail. (CO3,K1) 6
- 3.f. Discuss Fintech case study of the design thinking application -CANVAS. (CO4,K3) 6
- 3.g. Prove that Human is a Co-existence of Self and Body. (CO5,K2) 6

SECTION-C

50

4. Answer any one of the following:-

- 4-a. Discuss importance of the RCA in terms of the Arvind Eye Care . Justify it.(CO1,K3) 10
- 4-b. Define the Purpose of the 5 Why and Higher Purpose with an example. (CO1,K3) 10

5. Answer any one of the following:-

- 5-a. Why is it essential to gather user feedback during prototyping, and how can it guide the revision of your brainstormed ideas during the 1000gm stage?. (CO2,K2) 10
- 5-b. Define brainstorming and explain the rules for doing successful brainstorming. (CO2,K2) 10

6. Answer any one of the following:-

- 6-a. Explain different types of classes of defects in quality control and how the defect classification can be applied in the manufacturing process. (CO3,K3) 10
- 6-b. Differentiate between Observation and the Shadowing methods . It is found that 250 errors in the randomly selected 1000 lines of code from Team A and 300 errors in 800 lines of code from Team B. Can we assume that team B's performance is superior to that of A.(CO3,K3) 10

7. Answer any one of the following:-

- 7-a. Suggest the changes you would like to implement as a leader to bring harmony among the employees of your company. (CO4,K2) 10
- 7-b. Critically apprise the capacity levers in reference to persona of a leader. Describe the different types of the Leadership styles.(CO4,K3) 10

8. Answer any one of the following:-

- 8-a. Define the Interconnectedness and mutual fulfilment among the four orders of nature recyclability and self-regulation in nature. Explain the shifting the Thinking .(CO5,K3) 10
- 8-b. Define the importance of the behaviour skills in design thinking . Explain the term ENFJ in terms of MBTI test .Justify with an example(CO5,K3) 10

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