

Code No: 154CU**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech II Year II Semester Examinations, February - 2024****DESIGN THINKING****(Computer Science and Design)****Time: 3 Hours****Max. Marks: 75****Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A**(25 Marks)**

- 1.a) Explain briefly about Thinking from the problem before thinking of a solution. [2]
- b) Write a short note on Creative thinking as basis of innovation. [3]
- c) Write a short note on Brainstorming potential solutions. [2]
- d) Explain briefly about Understanding and identifying weak signals. [3]
- e) Write a brief note on Service Design. [2]
- f) Explain briefly about Development Process. [3]
- g) Define DFE. [2]
- h) What are the five stages of the Product Life Cycle? [3]
- i) Define Modularising. [2]
- j) Write a brief note on Design Thinking Principles. [3]

PART – B**(50 Marks)**

2. Discuss in detail about Empathy process for deep understanding of challenge with practical ingenuity. [10]

OR

- 3.a) Explain in detail about defining a point of view and context Design thinking skills for problem discovery.
- b) Discuss about Understanding user and customer perspectives. [5+5]

4. Explain in detail about 3-box thinking, 3-Box framework and Box-3 ideation with suitable examples. [10]

OR

- 5.a) Compare and contrast linear innovation vs. non-linear innovation.
- b) Explain in detail about task Unification Strategic Innovation for competition in future. [5+5]

6. Write a detailed note on Service experience cycle with a case study example. [10]

OR

7. Explain in detail about various aspects to be considered for enhancing Customer experience and brief on concern for innovation in markets. [10]
8. Discuss in detail about Concern for environment and sustainability in design. [10]

OR

9. Discuss with a case study about understanding a good design for DFE decisions. [10]
10. Write a detailed note on testing solution, refining solution, and taking the solution to the Users. [10]

OR

- 11.a) Explain in detail about: Identifying and resolving issues with working in diverse teams.
- b) Write a brief note on validated learning with accessible metrics. [5+5]

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