Chaitanya Bharathi Institute of Technology

Department of Mechanical Engineering BE VI SEM (CSE-2); AY-2024-25

Fundamentals of Design Thinking (22MEC36) Assignment-1

Max. Marks: 10 Last Date of Submission: 03-03-2025 Answer all the questions: 1. Compare and contrast linear thinking and lateral thinking with suitable real-life examples from engineering or product design. B4 2.5M (OR) Compare the Stanford d.school model and the Double Diamond model of design thinking. Which one do you think is more effective for product innovation? Why? CO₁ 2.5M B4 2. Discuss the importance of Design Thinking in engineering innovation. Explain how it is applied in at least two different domains. CO₁ 2.5M(OR) What is Design Thinking? Provide an example where Design Thinking offers a better C01 **B**3 solution than a conventional approach. 2.5M3. Differentiate between sympathy and empathy in the context of human-centered design. Give a scenario where a designer should be empathetic rather than sympathetic. C02 B3 2.5M(OR) List and explain the key steps in empathizing while designing a new product. Illustrate with an example of designing a mobile app for elderly people. C02 B3 2.5M **4.** How important is define phase in design thinking process? C03 B2 2.5M (OR) Describe the relation between analysis and synthesis in design thinking. B2 CO₃ 2.5M

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