

Code No.: CS733PE

R20

H.T.No.

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS

IV-B.TECH-I-Semester End Examinations (Regular) - November- 2023

OBJECT ORIENTED MODELING AND DESIGN
(CSE)

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(20 Marks)

1. a) Explain about Object Orientation methodology. [2M]
- b) List the advantages of abstract class. [2M]
- c) Discuss the usage of Lifelines in Sequence diagram. [2M]
- d) Define state chart diagram and discuss about transition in state chart. [2M]
- e) Explain about Inception Phase in detail. [2M]
- f) Define System Conception. [2M]
- g) Define the term use case realization. [2M]
- h) List the steps in creating Design Class Diagram. [2M]
- i) What are the benefits of knowing and using design patterns? [2M]
- j) Show the common element found in the singleton pattern and the factory pattern and give the difference between the two patterns. [2M]

PART-B

(50 Marks)

2. Explain briefly three models used in Object Oriented modeling and Design. [10M]
- OR**
3. Define Inheritance and briefly discuss about various kinds of Multiple Inheritance. [10M]
 4. List various types of actors used in Use Case diagram and Draw Use Case diagram for online shopping. [10M]
- OR**
5. Explain structural controls in sequence diagram and Draw a sequence diagram for printing a file. [10M]
 6. Define Elaboration and explain where it is used, when it is needed and why it is needed. [10M]
- OR**
7. Discuss about Domain Class Model in detail. [10M]
 8. Explain the notation used for Communication diagram. [10M]
- OR**
9. Discuss about Package diagram in detail and explain it with a diagram by considering relevant example. [10M]
 10. Define design pattern. List any five design problems and explain how design patterns solve them. [10M]
- OR**
11. Illustrate the procedure and consequences of Singleton and adaptor pattern in detail. [10M]
