Code No.: CS853PE | R20 | H.T.No. | | | 8 | R | | | | | |

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–II–Semester End Examinations (Regular) – April - 2024
DESIGN PATTERNS
(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) What is a Design Pattern?   [2M]
   b) List the four elements of design patterns?   [2M]
   c) Define anIterator class?   [2M]
   d) Define structure?   [2M]
   e) Define creational design patterns?   [2M]
   f) Description about the singleton creational pattern.   [2M]
   g) Define i) composite design pattern ii) bridge pattern   [2M]
   h) Sketch the structure of Façade pattern.   [2M]
   i) Explain the implementation issues of a Iterator pattern.   [2M]
   j) What is a Iterator design pattern?   [2M]

PART-B   (50 Marks)

2. Discuss the MVC architecture in small talk.   [10M]
OR
3. List the different sections of design patterns. Explain about them.   [10M]

4. Discuss about structure, applicability, participants ofabstract factory method   [10M]
OR
5. Explain the process of recursive composition in building a document. [10M]

6. Explain the implementation of abstract factory.   [10M]
OR
7. Discuss the implementation issues of builder design pattern.   [10M]

8. In what way structural pattern differs from creational pattern? Explain in detail.   [10M]
OR
9. Draw and explain the structure of a composite pattern.   [10M]

10. Briefly explain about the issues that should be considered while implementing the chain of   [10M]
    Responsibility pattern.
OR
11. Explain command design pattern and interpreter design pattern?   [10M]

****