

Code No: **R1641052**

R16

Set No.1

IV B.Tech I Semester Regular/Supplementary Examinations, Jan/Feb - 2022
SOFTWARE ARCHITECTURE AND DESIGN PATTERNS
(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any FOUR questions from Part-B

PART-A (14 Marks)

1. a) What are the Quality Attributes? [2]
b) List different Outputs of the ATAM. [2]
c) Explain Describing Design Patterns. [3]
d) Explain about Façade of structural pattern. [2]
e) Write a short note on chain of responsibility. [2]
f) Identify and explain Design Problems of document editor. [3]

PART-B (4x14 = 56 Marks)

2. a) Discuss in detail about Architecture Business. [7]
b) What are the architectural styles? List it's patterns. [7]
3. a) Explain about software architecture in the future. [7]
b) Discuss in detail the implementation of CBAM. [7]
4. a) Explain the applicability, participants and consequences of Abstract Factory [7]
creational Pattern.
b) Explain Factory method with an example. [7]
5. a) Explain the structure of Bridge pattern with example. [7]
b) Discuss about the Intent, Structure, Participants and related patterns of Proxy [7]
pattern.
6. a) Write about the useful technique for implementing State Design pattern. [7]
b) State the consequences and implementation of Chain of responsibility in [7]
behavioral pattern?
7. a) Explain Document Structure and User Operations of Designing a Document [7]
Editor.
b) Discuss about the supporting multiple window systems design problem. [7]