Code: 9A05801

R09

B.Tech IV Year II Semester (R09) Regular & Supplementary Examinations April 2016
DESIGN PATTERNS
(Common to CSE, IT & CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   (a)   Draw and explain the interaction diagram for ATM transaction.
    (b)   What is a class? Explain its role in design patterns.

2   (a)   How do we describe design patterns? Explain it in detail.
    (b)   Discuss in detail about the different criteria for design patterns.

3   (a)   Distinguish between glyphs and mono glyphs.
    (b)   What is the relation between encapsulation and window class? Explain.

4   (a)   How do we define implementation? List and explain the implementation issues for singleton pattern.
    (b)   When can we use the factory method? Draw and explain the structure of the factory method.

5   (a)   Explain the liabilities and benefits of decorator pattern. Also mention the issues to be considered while implement it.
    (b)   Explain the role of participants in adapter pattern.

6   (a)   What is the motivation for façade pattern? Explain it in detail.
    (b)   Write short notes on chain of responsibility.

7   Discuss in detail about the observer design pattern.

8   (a)   What is a state pattern? Explain the consequences of it in detail.
    (b)   What is the motivation for strategy pattern? Explain it in detail.

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