Hall Ticket Number :										

R-14

Code: 4G481

IV B.Tech. II Semester Advanced Supplementary Examinations May/June 2018

Design Patterns

(Common to CSE & IT)

Max. Marks: 70 Time: 3 Hours

Answer *all five* units by choosing one question from each unit (5 x 14 = 70 Marks)

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UNIT–I

1. a) What is the various way of organizing the design pattern? Explain 7M
   b) How do we describe design pattern? What the consistent format being used in design pattern. 7M

OR

2. a) Explain how design pattern are different from frameworks 4M
   b) Why should we abstract the process of object creation? How does GUI Factory class helps in doing so? 10M

UNIT–II

3. a) What do you mean by formatting? Explain it 7M
   b) What are the issues that must be considered while implementing prototype pattern. 7M

OR

4. a) Explain the process of recursive composition in building a document 7M
   b) How single-tone pattern ensure a single instance? Explain. 7M

UNIT–III

5. a) Discuss the importance of implementation in composite pattern. 7M
   b) Decorator provides a flexible alternative to sub classing for extending functionality .justify your answer. 7M

OR

6. a) Discuss the motivation, participants, collaborations and sample code of chain of responsibility pattern. 7M
   b) Explain the implementation issues of flyweight pattern. 7M

UNIT–IV

7. a) Explain the role of participants in command pattern. 7M
   b) Explain the consequences ,implementation and participants of an iterative pattern 7M

OR

8. a) Explain various aspects of observer pattern. 7M
   b) Discuss the three implementation issues in template method and when is this pattern used. 7M

UNIT–V

9. a) Enumerate any two consequences of state pattern. 4M
   b) Explain the participants, collaborations, implementation and sample code of the mediator pattern. 10M

OR

10. a) Refactoring is a problem in developing a reusable software, justify your answer 7M
    b) How does window Imp class encapsulate implementation dependencies? Explain it 7M

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Hall Ticket Number :										

R-14

Code: 4G487

IV B.Tech. II Semester Advanced Supplementary Examinations May/June 2018

Software Testing Methodologies

(Computer Science & Engineering)

Max. Marks: 70 Time: 3 Hours

Answer *all five* units by choosing one question from each unit (5 x 14 = 70 Marks)

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UNIT–I

1. a) What is the difference between testing and debugging? Explain. 7M
   b) Describe Integration and System Bugs. 7M

OR

2. a) Describe the Dichotomy Function versus Structure. 7M
   b) List and explain the factors on which the importance of bugs depends on. 7M

UNIT–II

3. a) Differentiate Control Flow graphs versus Flow charts. 7M
   b) Discuss in detail about the Testing Blindness. 7M

OR

4. Define Path Sensitization and explain the Heuristic procedure for sensitizing the paths. 14M

UNIT–III

5. List and explain various testing strategies for Data flow testing in detail. 14M

OR

6. a) What are the various complications in Transaction Flow graphs? Explain. 7M
   b) Explain nice and ugly domains in detail. 7M

UNIT–IV

7. Describe the procedure to find the maximum path count arithmetic of a given graph using node reduction algorithm 14M

OR

8. a) Define Path, Path Product and Path sum with examples. 7M
   b) Why the decision tables can be used as basis for test case design? Justify. 7M

UNIT–V

9. a) List the principles to define whether the given state graph is a good or not. 7M
   b) What is connection matrix? Explain with an example? 7M

OR

10. What is state? Explain the state graphs and their transitions with a suitable example and draw state table to the state graph. 14M

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