

Total No. of Questions : 10]

SEAT No. :

P2997

[Total No. of Pages : 2

[5669]-589

T.E. (Computer Engineering) (Semester - II)

SOFTWARE MODELING AND DESIGN

(2015 Pattern)

Time : 2.30 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data if necessary.
- 4) Figures to the right indicate full marks.

Q1) a) Define software design and give its importance. [5]

b) Define component. Compare component and deployment diagram. [5]

OR

Q2) a) Explain 4+1 View Architecture of UML. [5]

b) Draw Use Case diagram for Online Shoppe system. [5]

Q3) a) Explain join, fork and swimlane concept with activity diagram. [5]

b) Define interface. Explain required and provided interface with example. [5]

OR

Q4) a) Explain with an example the difference between aggregation and composition. [5]

b) Define interface. Explain required and provided interface with example. [5]

Q5) a) Explain Client Server architecture in detail. [8]

b) Explain real time architecture with a suitable example. [8]

OR

Q6) a) Explain object oriented architecture with a suitable example. [8]

b) Explain broker pattern for service oriented architecture. [8]

P.T.O.

Q7) a) What is the use of design pattern in modern software development?
Explain categories of design pattern. [8]

b) What is singleton pattern? Explain with suitable example. [8]

OR

Q8) a) Explain factory method with its intent, motivation and implementation
with suitable example. [8]

b) Explain iterator design pattern with suitable example. [8]

Q9) a) What is integration testing? Explain its type in detail. [6]

b) What is performance testing? List few tools of performance testing. [6]

c) Explain difference between verification & validation. [6]

OR

Q10) a) What is Cyclomatic Complexity? Explain with example. [6]

b) Define test case? What is the importance test case? Give example. [6]

c) Explain acceptance testing in detail. [6]

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