[5354]-682

B.E. (Computer Engineering) (End Sem)
SOFTWARE DESIGN METHODOLOGIES AND TESTING
(2012 Pattern)

Time : 2½ Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) *Neat diagrams must be drawn wherever necessary.*
2) *Assume suitable data, if necessary.*

Q1) a) Explain the concept of object oriented analysis and designing and its role in modern application software development **[5]**

b) Explain use case actor. Who are primary and secondary actors? Explain with example. **[5]**

OR

Q2) a) Explain the significance of static modeling? Give the UML notations for Representing class in class diagram. **[5]**

b) What is software Design? What is the major classification of software design based on abstraction level? **[5]**

Q3) a) Explain multiple client multiple service architectural pattern with a suitable example. **[5]**

b) Explain factory pattern. Describe its intent, motivation and implementation with suitable example. **[5]**

OR

Q4) a) Explain location transparency and platform transparency in service oriented architecture. **[5]**

b) Explain the Iterator pattern with suitable example and class diagram. **[5]**

P.T.O.

Q5) a) What is defect management?Discuss the generic steps in defect management process? **[8]**

b) Explain V test model with suitable block diagram? **[8]**

OR

Q6) a) What is validation ? Explain various levels of validation? **[8]**

b) What are various principles of testing? **[8]**

Q7) a) Differentiate between alpha and beta testing? **[6]**

b) Explain graph based testing with example? **[6]**

c) What is security testing. Explain different types security testing. **[6]**

OR

Q8) a) What is performance testing. Explain the need of performance testing.**[6]**

b) What is equivalence partitioning? Explain with example. **[6]**

c) Write short note on test metrics. **[6]**

Q.9) a) Difference between functional and nonfunctional testing. **[8]**

b) Write a short note on GUI testing? **[8]**

OR

*Q.10)*a) What is mobile testing? Mention the challenges in mobile testing? **[8]**

b) Write short note on: **[8]**

i) JUnit

ii) Selenium

○○○