| Total No. of Questions: 10] | SEAT No.: |
|-----------------------------|-------------------------|
| P3226 | [Total No. of Pages : 2 |

[5354]-682

B.E. (Computer Engineering) (End Sem) (2012 **Pattern**)

SOFTWARE DESIGN METHODOLOGIES AND TESTING Time: 2½ Hours] [Max. Marks: 70 Instructions to the candidates: Neut diagrams must be drawn wherever necessary. 1) 2) Assume suitable data, if necessary. Explain the concept of object oriented analysis and designing and its **Q1)** a) role in modern application software development [5] Explain use case actor. Who are primary and secondary actors? Explain b) with example. [5] Explain the significance of static modeling? Give the UML notations for **Q2)** a) Representing class in class diagram. [5] What is software Design? What is the major classification of software b) design based on abstraction level? Explain multiple client multiple service architectural pattern with a suitable **Q3**) a) example. [5] Explain factory pattern. Describe its intent, motivation and implementation b) with suitable example. [5] OR Explain location transparency and platform transparency in service oriented architecture.

- **Q4**) a)
 - Explain the Iterator pattern with suitable example and class diagram. [5] b)

| Q5) a) | What is defect management? Discuss the generic steps in d management process? | efect [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 | ıg.[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) | i) JUnit | [8] |
| | i) JUnit | 3 |
| | ii) Selenium | |
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| | 6,6 | |
| | What is mobile testing? Mention the challenges in mobile testing? Write short note on: i) JUnit ii) Selenium | |
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