

Total No. of Questions : 10]

SEAT No. :

P2337

[Total No. of Pages : 2

[5254]-672

B.E. (Computer Engineering)

**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 Aggregation, Composition and Generalisation with reference to Class Diagram? [5]
- b) Explain the fundamental design concepts applied in modern software design. [5]

OR

- Q2)** a) What is Unified Modeling Language (UML)? List few standard notation and diagrams of UML [5]
- b) What extension points in use cases? Explain with proper use case description and diagram. [5]
- Q3)** a) Explain the concept of generalization and specialization of class hierarchies using suitable example and class diagram. [5]
- b) What is Iterator pattern ? Explain one example scenario where you will Iterator pattern to get applied. [5]

OR

- Q4)** a) What is software architectural pattern ? And why they are important in modern software development? Explain in brief. [5]
- b) What are important design principles for service oriented architecture?[5]

P.T.O.

- Q5) a) Explain V test model with suitable block diagram? [8]**
b) What are different advantage and disadvantage of validation? [8]

OR

- Q6) a) Explain the cases and effects of defects? [8]**
b) Explain the defect management process with suitable block diagram?[8]
- Q7) a) Briefly explain different types of functional system testing. [6]**
b) Explain graph based testing with example? [6]
c) What is security testing. Explain different types security testing. [6]

OR

- Q8) a) Differentiate between white box and black box testing. [6]**
b) Explain regression testing. [6]
c) What is testing? List the benefits of unit testing. [6]
- Q9) a) What is functional testing ? Explain its types? [8]**
b) What are different required features in automated testing tools and explain them. [8]

OR

- Q10)a) What are the selection criteria of automated testing tool? [8]**
b) Write Short note on: [8]
i) Monkey talk
ii) Selenium

