

Total No. of Questions : 8]

SEAT No. :

**P3537**

**[5560]-189**

[Total No. of Pages : 2

**T.E. (Computer Engineering)**  
**SOFTWARE ENGINEERING**  
**(2012 Pattern) (Semester - II) (310252)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Solve question number 1 or 2,3 or 4,5 or 6 and 7 or 8.*
- 2) Neat diagram must be drawn whenever necessary.*
- 3) Figures to the right indicate full marks.*
- 4) Assume Suitable datas if necessary.*

- Q1)** a) What is software engineering? What are the characteristics of software?[6]  
b) Describe the User Interface analysis and design process with diagram and Explain interface design element. [7]  
c) What is the fundamental difference between the structured analysis and object oriented strategies for requirements analysis. [7]

OR

- Q2)** a) Explain in detail the Unified process indicating workflows and process phases. What are the advantages of iterative development? [7]  
b) Explain Behavioral model and what types of “states” behavioral model represents? [7]  
c) Explain the quality attributes, considered in software design. [6]

- Q3)** a) What do you understand by the term integration testing? Which types of defects are uncovered during integration testing. [6]  
b) Distinguish between [6]  
i) alpha testing and beta testing  
ii) Verification and validation  
c) Describe User Interface Testing, Positive testing and Negative testing. [5]

OR

- Q4)** a) Explain Boundary value analysis testing and orthogonal Array testing. [6]  
b) Explain System testing and regression testing? [6]  
c) Basis path testing covers all statements in program module. Justify with example. [5]

**P.T.O.**

- Q5)** a) Explain COCOMO II model. [6]  
b) List the four P's of software project management spectrum. Explain how "the people" factor contributes towards the success of the software project. [6]  
c) Explain the decision tree for make/buy decision. [5]

OR

- Q6)** a) Explain project scheduling? What are the basic principles of project scheduling? [6]  
b) Discuss time line chart? Explain with suitable examples. [6]  
c) Explain Risk identification? What are the different categories of risks? [5]

- Q7)** a) Explain Service-oriented architecture? [5]  
b) What is OCL? Where it is used? [5]  
c) Discuss architectural patterns in detail? [6]

OR

- Q8)** a) What is client server computing? Explain. [5]  
b) Explain ISO 9126 Quality Factors. [5]  
c) Describe the formal methods for software development? [6]

