Total No. of Questions :10]

SEAT No. :

**P1760**

[Total No. of Pages :2

# [5058]-400

## T.E. (Computer Engineering)

## SOFTWARE ENGINEERING

## (2012 Pattern) (End Semester) (Semester - II) (310252)

*Time : 2½ Hours]* *[Max. Marks :70*

***Instructions to the candidates:***

1) ***Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.***
2) ***Neat diagram must be drawn whenever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Assume suitable data, if necessary.***

***Q1)*** a) What is software engineering? What are the characteristics of software? **[5]**

b) Explain in detail the Unified process indicating workflows and process phases. What are the advantages of iterative development? **[5]**

OR

***Q2)*** a) What do you understand with the Validating requirements? **[5]**

b) Explain Behavioral model and what types of "states" behavioral model represents? **[5]**

***Q3)*** a) Describe the User Interface analysis and design process with diagram and Explain interface design element. **[5]**

b) What do you mean by the term cohesion and coupling in the context of software design? How are these concepts useful in arriving at a good design of a system? **[5]**

OR

***Q4)*** a) What is the fundamental difference between the structured analysis and object oriented strategies for requirements analysis. **[5]**

b) Explain the quality attributes, considered in software design. **[5]**

***P.T.O.***

***Q5)*** a) What do you understand by the term integration testing? Which types of defects are uncovered during integration testing. **[5]**

b) What is the difference between alpha testing and beta testing? **[5]**

c) What do you understand by White box testing? **[7]**

OR

***Q6)*** a) Explain Boundary value analysis testing and orthogonal Array testing. **[5]**

b) Explain smok testing and regression testing? **[5]**

c) Basis path testing is covers all statement in program module. Justify with example. **[7]**

***Q7)*** a) Explain COCOMO II model. **[5]**

b) List the four P's of software project management spectrum. Explain how "the people" factor contributes towards the success of the software project. **[5]**

c) Explain the decision tree for make/buy decision. **[7]**

OR

***Q8)*** a) What is project scheduling? What are the basic principles of project scheduling? **[5]**

b) What is time line chart? Explain with suitable examples. **[5]**

c) What is Risk identification? What are the different categories of risks? **[7]**

***Q9)*** a) What is Service-oriented architecture? **[5]**

b) What is OCL? Where it is used? **[5]**

c) Discuss architectural patterns in details. **[6]**

OR

***Q10)*** a) What is client server computing? Explain. **[5]**

b) Explain ISO 9126 Quality Factors. **[5]**

c) What are formal methods for software development? **[6]**

*EEE*