P3537

SEAT No. :

[5560]-189

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 understad 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 Nagative 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 is covers all statement in program module. Justify with example. **[5]**

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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]

<div align="center">OR</div>

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]

<div align="center">OR</div>

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]

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