

**Fifth Semester B.E. Degree Examination, Dec.09/Jan.10**

**Software Engineering**

Max. Marks:100

Time: 3 hrs.

**Note: Answer any FIVE full questions, selecting at least TWO questions from each part.**

**PART – A**

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|---|---|------------|
| 1 | a. What are the attributes of a good software? Explain.   | (06 Marks) |
|   | b. Mention the different stages in a system development. Explain any four phases.                                 | (10 Marks) |
|   | c. Define and distinguish between the system reliability and availability.  | (04 Marks) |
| 2 | a. What is process iteration? Explain Boehm's spiral model.   | (10 Marks) |
|   | b. With an example, explain the functional and non-functional requirements.                                       | (10 Marks) |
| 3 | a. Explain the need for requirements elicitation and analysis. Explain the different process activities involved. | (10 Marks) |
|   | b. Why risk management is important in project management? Explain different stages in risk management.           | (10 Marks) |
| 4 | a. What is data flow model? With an example, show the notations used in data flow model.                          | (10 Marks) |
|   | b. Explain the terms :  | (03 Marks) |
|   | i) Domain requirements  | (03 Marks) |
|   | ii) User requirements   | (04 Marks) |
|   | iii) System requirements.   |            |

**PART – B**

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|---|---|------------|
| 5 | a. Explain why it is necessary to design the system architecture. What are the system factors affected by system architecture? Explain. | (10 Marks) |
|   | b. Distinguish between an object and an object class. Give example.   | (06 Marks) |
|   | c. What are concurrent objects? Explain different kinds of concurrent object implementations.   | (04 Marks) |
| 6 | a. What is rapid delivery and deployment of new systems? Explain its importance.  | (10 Marks) |
|   | b. What are the different types of software maintenance? What are the key factors that distinguish development and maintenance?         | (10 Marks) |
| 7 | a. Distinguish between software inspection and testing. What are the advantages of inspection over testing?                             | (08 Marks) |
|   | b. Explain with illustrations :   | (06 Marks) |
|   | i) Integration testing  | (06 Marks) |
|   | ii) Release testing   |            |
| 8 | a. Explain Maslow's human-needs hierarchy of motivating people.   | (10 Marks) |
|   | b. What are the factors affecting software pricing? What are the two types of metrics used? Explain.                                    | (10 Marks) |

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Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. 2. Any revealing of identification, appeal to evaluator and/or Equations written eg. 42+8=50, will be treated as malpractice.