

**FACULTY OF ENGINEERING****B.E. 3/4 (CSE) I – Semester (Main) Examination, November 2013****Subject : Software Engineering****Time : 3 hours****Max. Marks : 75****Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.****PART – A (25 Marks)**

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|--|---|
| 1. What are umbrella activities? Give an example.                                | 3 |
| 2. Define personal software process.   | 2 |
| 3. Why do we use CPM (Critical Path Method)?                                     | 2 |
| 4. What does the requirements engineer do in the requirements elaboration phase? | 3 |
| 5. List the goals of a good design.  | 3 |
| 6. What does a state diagram represent?  | 2 |
| 7. What is the purpose of a Data design?   | 3 |
| 8. List the Golden rules for interface design.                                   | 2 |
| 9. When is software said to be testable?   | 3 |
| 10. Define software quality.   | 2 |

**PART – B (50 Marks)**

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| 11. "The S.E.I. (Software Engineering Institute) has developed a comprehensive model predicated on a set of software engineering capabilities that should be present as organizations reach different levels of process maturity". Explain the model in detail. | 10 |
| 12. Explain in detail the COCOMO-II.  | 10 |
| 13. Explain in detail class-based modeling.   | 10 |
| 14. List and explain in short the steps in architectural design process.  | 10 |
| 15. Explain in detail incremental integration testing and its kinds.  | 10 |
| 16. Write short notes on the following :  |    |
| a) AM (Agile Modeling)  | 3  |
| b) Elements of Requirements Analysis Model  | 4  |
| c) Pattern based software design  | 3  |
| 17. Write short notes on the following :  |    |
| a) Call-and-Return Architectural style  | 4  |
| b) Fault Based Testing  | 3  |
| c) Metrics for Analysis model   | 3  |

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