

Time: 3 Hrs

Max. Marks: 80

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Note :

1. Question 1 is compulsory
2. Answer any three out of the remaining questions

**Q.1 Solve any 4 (Four)**

**[5 marks each]**

- A) Explain in brief the software engineering layers.
- B) Differentiation between Prescriptive and Evolutionary Process Models.
- C) Mention any four requirement Elicitation Methods.
- D) Explain size-oriented software engineering metrics.
- E) What is meant by Effective Modular Design?
- F) What are three important categories of risk? Give examples of each.

**Q.2**

- A) Explain the Software Process with detailed umbrella activities. [10]
- B) Draw a use case diagram for the Library Management System. [10]

**Q.3**

- A) Explain SCM (Software Configuration Management) Process with version control and change control. [10]
- B) What is user interface design? Explain it with an example. [10]

**Q.4**

- A) Explain COCOMO Model. [10]
- B) Compare Verification and Validation Testing. [10]

**Q.5**

- A) What are different views of a component level design? Explain in detail [10]
- B) Explain different metrics used for maintaining software quality. [10]

**Q.6 Solve any 4 (Four)**

**[5 marks each]**

- A) Discuss incremental model for software development with merits and demerits.
- B) Explain Coupling and Cohesion. Explain the types of coupling with examples.
- C) Explain different steps in risk management with a suitable diagram
- D) Write short note on System Testing.
- E) Explain principles of Agile Methodology.
- F) What are Software Re-engineering and Reverse Engineering? Explain.