

**Time: 3 Hours****Max. Marks: 60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

PART - A**5 × 4 Marks = 20**

- 1.a) Explain about software Legacy. [4]
- b) Describe the need of software requirements document. [4]
- c) What are the golden rules for designing user Interface? [4]
- d) Explain about graph-based testing methods. [4]
- e) Discuss about the RMMM plan in brief. [4]

PART - B**5 × 8 Marks = 40**

- 2.a) Define a process model. Explain about Prototyping process model. [4+4]
 - b) What is CMMI? Explain in detail. [4+4]
- OR**
- 3.a) Describe the changing nature of software. [4+4]
 - b) What are phases of the Unified process mode? Explain briefly. [4+4]
- 4.a) How to validate requirements? [4+4]
 - b) Explain in brief about object models. [4+4]
- OR**
- 5.a) Describe functional and non-functional requirements. [4+4]
 - b) What are feasibility studies? Explain in detail about requirements elicitation phase. [4+4]
- 6.a) What is meant by pattern? Explain its role in software design. [4+4]
 - b) Describe refining the architecture into components. [4+4]
- OR**
- 7.a) Distinguish between cohesion and coupling. [4+4]
 - b) Discuss about user interface design steps. [4+4]
- 8.a) Explain in detail about alpha and beta testing. [4+4]
 - b) What are the metrics used for design model? [4+4]
- OR**
- 9.a) What are debugging strategies? Explain. [4+4]
 - b) Describe a framework for product metrics. [4+4]
10. Explain the following: [4+4]
 - a) Developing a risk table
 - b) SQA
- OR**
11. Explain the following: [4+4]
 - a) Software reliability
 - b) Risk identification