

**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**

**II–B.TECH–II–Semester End Examinations (Regular) -June- 2025**

**SOFTWARE ENGINEERING**

**(Common for IT, CSM, CSE, CSD, CSC)**

**[Time: 3 Hours]**

**[Max. Marks: 60]**

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 10 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART-A**

**(10 Marks)**

1. a) List out different types of software process models. [1M]
- b) Write briefly about CMMI. [1M]
- c) What are the differences between functional requirements and non-functional requirements? [1M]
- d) What is an object model? [1M]
- e) Write the importance of Structured design and analysis. [1M]
- f) What is collaboration diagram? [1M]
- g) What is system testing? [1M]
- h) Define software quality. [1M]
- i) How to measure software? Explain. [1M]
- j) What are different software risks? [1M]

**PART-B**

**(50 Marks)**

2. Write about different software Myths. [10M]
- OR**
3. Explain the prototyping model with the help of a neat diagram. [10M]
  4. Describe about Software Requirement Specification (SRS) and the characteristics needed for good SRS. [10M]
- OR**
5. Explain about data model with example. [10M]
  6. Why is it important to achieve high cohesion and low coupling in software modules? Explain with examples. [10M]
- OR**
7. What is a class diagram? Explain how it helps to design the structural modeling of software with example. [10M]
  8. Describe the concept of black-box testing and provide examples of situations where it is particularly useful. [10M]
- OR**
9. What are the metrics used for software maintenance? Explain. [10M]
  10. Discuss the software metrics that can be applied to the qualitative assessment of software quality. [10M]
- OR**
11. Explain about RMMM. [10M]

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