CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II–B.TECH–II–Semester End Examinations (Supply) - December- 2025
SOFTWARE ENGINEERING
(Common to CSE, IT)

[Time: 3 Hours]   **[Max. Marks: 70]**

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 10 marks and may have a, b, c as sub questions.

PART-A   (20 Marks)

1. a) Define software engineering. [2M]
   b) What are myths and realities of management myth? [2M]
   c) Who should be involved in requirements review? [2M]
   d) What are software requirements and mention their types? [2M]
   e) List the main components of a use case diagram. [2M]
   f) Define software architecture. [2M]
   g) Write the art of debugging. [2M]
   h) Define white box testing. [2M]
   i) What is meant by software reliability? [2M]
   j) Write the role of risk table in risk management. [2M]

PART-B   (50 Marks)

2. With the help of a neat diagram, explain the waterfall model. [10M]

OR

3. Discuss the Capability Maturity Model Integration (CMMI). [10M]

4. Explain various categories of non-functional requirements and their importance in SRS document. [10M]

OR

5. Discuss about requirement engineering process activities and their relationships. [10M]

6. Briefly describe each of the four elements of the design model. [10M]

OR

7. Discuss the process of mapping data flow into software architecture. [10M]

8. What is black box testing? Explain the technique specifying rules and its usage with the help of an example. [10M]

OR

9. Explain the strategic approach to software testing. [10M]

10. With an example, illustrate the problems associated with a reactive risk strategy. [10M]

OR

11. Describe how you would assess the quality of a university before applying to it. What factors would be important? Which would be critical? [10M]

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