CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II–B.TECH–II–Semester End Examinations (Supply) - June- 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) List out the differences between Agile Model and Waterfall Model.   [2M]
   c) What are user requirements and system requirements?   [2M]
   d) Define data models.   [2M]
   e) What is the usage of component diagrams?   [2M]
   f) What is software design process?   [2M]
   g) Write the metrics for the design model.   [2M]
   h) Define black box testing.   [2M]
   i) What is meant by software quality assurance?   [2M]
   j) Define software reliability.   [2M]

PART-B   (50 Marks)

2. Discuss the evolutionary process models.   [10M]

OR

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

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

OR

5. Develop SRS with standard template for University Result Maintenance System.   [10M]

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

OR

7. What is meant by software architecture? Explain the taxonomy of architectural styles.   [10M]

8. Explain the validation testing and system testing.   [10M]

OR

9. Define software quality. Explain the software quality parameters.   [10M]

10. Explain the reactive vs. proactive risk strategies.   [10M]

OR

11. Elaborate the statistical software quality assurance.   [10M]

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