

Code No.: AI502PC

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**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**  
**III-B.TECH-I-Semester End Examinations (Supply) - May- 2023**  
**SOFTWARE ENGINEERING**  
**(Common for CSC, CSD, CSM)**

[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.

**PART-A**

**(20 Marks)**

1. a) Define software? [2M]
- b) Write the evolving role of software. [2M]
- c) What is meant by data model? [2M]
- d) What is the significance of feasibility studies in requirement engineering? [2M]
- e) Define use case diagrams. [2M]
- f) Write the user interface design process. [2M]
- g) What is meant by testing? Write the testing process. [2M]
- h) Differentiate between testing and debugging. [2M]
- i) Write the ISO 9000 quality standards. [2M]
- j) Define software reliability? [2M]

**PART-B**

**(50 Marks)**

2. List and explain the nature of software and software characteristics. [10M]
- OR**
3. With the help of neat diagram, explain the waterfall model. [10M]
4. Make a comparisons between the Functional and non-functional software requirements. [10M]
- OR**
5. Identify and explain four types of requirements that may be defined for computer based system. [10M]
6. Discuss about design patterns and their role in software design. [10M]
- OR**
7. Define Software architecture. Explain why it may be necessary to design the system architecture before the specifications written with example. Compare function oriented and object oriented designs. [10M]
8. Discuss the Metrics for Analysis Model and Metrics for Design Model. [10M]
- OR**
9. What is black box testing? What is boundary value Analysis? Explain the technique specifying rules and its usage with the help of an example. [10M]
10. Describe how you would assess the quality of a university before applying to it. What factors would be important? Which would be critical? [10M]
- OR**
11. Write a short note on the following [10M]
  - i. The RMMM Plan.
  - ii. Risk projection.

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