

Code No.: AD303PC

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II-B.TECH-I-Semester End Examinations (Supply) – August - 2023
SOFTWARE ENGINEERING
(AI&DS)

[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) What is Software engineering? [2M]
- b) Describe the advantages of unified process model? [2M]
- c) List out the metrics for specifying non-functional requirements. [2M]
- d) Explain the purpose of context model. [2M]
- e) List out the principles of a software design. [2M]
- f) Describe architectural styles? [2M]
- g) What are the objectives of testing? [2M]
- h) What is meant by debugging? [2M]
- i) List out the types of software metrics? [2M]
- j) Discuss the reactive risk strategy? [2M]

PART-B

(50 Marks)

2. Explain the following: [10M]
 - i) Water fall model
 - ii) Spiral Model.
- OR**
3. Interpret the various levels of capability maturity model integration (CMMI)? [10M]
4. Explain clearly about software requirements document? [10M]
- OR**
5. Evaluate the operations involved in creating data models and object models? [10M]
6. Illustrate the usage of sequence diagrams and collaboration diagrams with a neat sketch. [10M]
- OR**
7. Explain briefly about the process of mapping dataflow into software architecture? [10M]
8. Explain in detail about white-box and black-box testing techniques? [10M]
- OR**
9. Discuss about metrics for design model and source code? [10M]
10. Describe the basic concepts related to software quality assurance in detail. [10M]
- OR**
11. Explain the following: [10M]
 - a) Risk projection
 - b) Software reviews.
