



R20 Regulation

Subject code: 3P4EC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech IV Semester Regular/Supplementary Examinations, September 2023

SOFTWARE ENGINEERING
(Common to CSE and CSE(AI&ML))

Maximum Marks: 70

Date: 19.09.2023 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 What is meant by Legacy software?
- 2 Define process pattern.
- 3 What is requirements elicitation?
- 4 Define data models and their purpose in system representation.
- 5 What is software design?
- 6 What is the Object Constraint Language (OCL)?
- 7 List out the test strategies for conventional software.
- 8 Mention some common metrics used for evaluating source code quality.
- 9 What is meant by reactive risk management in software development?
- 10 Discuss the term "Risk Refinement".

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 A. State and explain various types of software myths related to management. [6M]
B. Write the advantages and disadvantages of waterfall model. [4M]
OR
- 12 A. Explain process framework activities. [5M]
B. Explain in detail the capability Maturity Model Integration (CMMI). [5M]
- 13 A. Differentiate between functional and non-functional requirements. [5M]
B. Discuss the various steps in requirement engineering. What are the work products of engineering the requirements? [5M]
OR
- 14 Explain about the object models and structured methods. [10M]
- 15 Explain the process of mapping dataflow into software architecture. [10M]
OR
- 16 A. Explain the concepts of software engineering design. [5M]
B. What is architecture style? List out the various categories of it. [5M]

17 Explain white box testing methods and its advantages and disadvantages. [10M]

OR

18 Discuss about the Metrics for testing and source code. [10M]

19 A. Explain about RMMM Plan. [5M]

B. Discuss about process risks. [5M]

OR

20 A. Explain the importance of risk identification in the risk management process. [5M]

B. Describe various techniques for identifying risks and provide examples. [5M]