

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - III COMPUTER SCIENCE & ENGINEERING : SUMMER : 2024
SUBJECT: SOFTWARE ENGINEERING

Day : Wednesday
Date : 15/05/2024

S-25313-2024

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.

Q.1 Define software engineering. Discuss the nature of software and why software engineering is necessary in today's technology-driven world. [10]

OR

Q.1 Explain the software process and its importance in software development. Discuss different phases of the software process. [10]

Q.2 Explain the importance of requirement engineering in software development. Discuss techniques for eliciting and documenting requirements. [10]

OR

Q.2 Describe the process of building a use case and analyze its significance in requirement engineering. [10]

Q.3 Introduce the concept of software project management. Discuss the selection of project approaches and their implications. [10]

OR

Q.3 Explain project estimation techniques, including algorithmic and expert judgement-based methods. Discuss their strengths and weakness. [10]

Q.4 Discuss the design process in software engineering. Explain the importance of design models such as data design, Architecture design, and interface design. [10]

OR

Q.4 Define and discuss key design concepts such as abstraction, modularity, and object-oriented design principles. [10]

Q.5 Discuss different coding approaches and standards used in software development. How do coding standards contribute to code quality and maintainability? [10]

OR

Q.5 Explain the software testing life cycle and its phases. Discuss the principles of software testing and their significance. [10]

Q.6 Define software maintenance and explain its significance in software engineer. Discuss the factors that contribute to software supportability. [10]

OR

Q.6 Explain the concept of reengineering, including business process reengineering and software reengineering. Discuss the goals and challenges of these processes. [10]

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