

BACHELOR OF TECHNOLOGY (CBCS - 2023)
B. Tech. Sem-III Computer Science & Engineering : WINTER: 2025
SUBJECT: SOFTWARE ENGINEERING

Day : Wednesday
Date : 17/12/2025

W-29203-2025

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labelled diagrams **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

Q.1 Define Software Engineering and Explain its unique characteristics. (10)

OR

Draw and Explain software development life cycle in detail. (10)

Q.2 Define requirements engineering. Explain its significance in software development. (10)

OR

What are the key steps involved in eliciting requirements? Provide examples of techniques used in the process. (10)

Q.3 Describe the process of project planning and scheduling. Draw Gantt Chart with any one example. (10)

OR

What are different project organization and team structures? Explain the advantages and disadvantages of any two sketch. (10)

Q.4 Explain the design process in software engineering. How does it transform requirements into a workable solution? (10)

OR

What are the key components of the design model? Explain the data design model and architect design model. (10)

Q.5 Explain the phases of the Software testing life cycle. How does it ensure the quality of the software product? (10)

OR

What are the core software Testing Principles? Explain how they guide effective testing practices. (10)

Q.6 What is software maintenance? Discuss the different types of software maintenance and their importance. (10)

OR

What is Reengineering in software development? Explain its significance in modern software maintenance practices. (10)

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