

## **Assignment**

- Note: 1) Submit your whole assignment by this deadline.**  
**2) Submit your assignment in file.**  
**3) Write your Name, Enrollment No and Class on your assignment.**

| Subject Name & Code            | Semester        | Issue Date | Due Date   |
|--------------------------------|-----------------|------------|------------|
| Software Engineering(01CE0607) | 6 <sup>th</sup> | 28/03/2025 | 07/04/2025 |

| Sr. No | Question  | Level as per Bloom's Taxonomy | CO  |
|--------|---|-------------------------------|-----|
| I      | <b>Introduction to Software Engineering and Software process models Software engineering</b><br><br>a) Discuss the various myths associated with software development. How do these myths impact the perception and execution of software projects?<br><br>b) Describe the Agile Manifesto and its key principles. How does Agile differ from traditional software process models such as the Linear Sequential Model and the Prototyping Model?  | Understand                    | CO1 |
| II     | <b>Project Management Concepts</b><br><br>a) Consider a project which has 10 user inputs, 10 user outputs, 35 external inquiries, 06 internal logical files and 04 external interface files. Assume that all complexity adjustment factors and weighting factors are average. Compute the function points for the project.<br><br>b) How would you address risks like unrealistic scheduling, frequent requirement changes, and lack of skilled personnel to ensure project success? Propose suitable strategies. | Apply                         | CO2 |
| III    | <b>Requirement Analysis and Design Concepts</b><br><br>a) Examine how a Software Requirements Specification (SRS) document influences software design decisions. Break down its key components and analyze its impact   | Analyze                       |     |

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|    | on project success.<br>b) Analyze and compare different software design techniques, including function-oriented design, object-oriented design, architectural design, and behavioural design. How do these approaches influence modularity, scalability, and system maintainability?                          |                            | C03 |
| IV | <b>Coding and Testing</b><br><br>a) List and describe key coding standards and guidelines. How do they contribute to software quality and maintainability?  | Remember                   | C04 |
|    | b) Examine the differences between White Box and Black Box testing techniques. How do their testing approaches impact defect detection and software reliability?  | Analyze                    |     |
| V  | <b>Software Quality Assurance and Maintenance</b><br><br>a) What are the key objectives of Software Configuration Management (SCM)? List and describe its main activities.<br>b) Describe the Capability Maturity Model (CMM) and ISO 9000 quality standards. How do they help in improving software quality? | Remember<br><br>Understand | C05 |

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