ACHARYA INSTITUTES Library BANGALORE

CBCS SCHEME

USN

21CS61

Sixth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026
Software Engineering and Project Management

Time: 3 hrs. Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-1

1 a. What is Software Engineering? Explain the software engineering practice in detail. (06 Marks)

b. Define software Myth. Demonstrate customer myth and practitioners myth in detail. (07 Marks)

c. Elaborate on incremental model along with its advantages and disadvantages. (07 Marks)

OR

2 a. Identify the model which is well suited for the below scenario and explain in detail. The SBI Bank Manager gives requirements to develop SBI banking application. The manager states that the requirements are stable and changes are not required in future. (08 Marks)

b. Show the process flow in spiral model along with neat diagram. (06 Marks)

c. Discuss the common attributes or characteristics for Web App. (06 Marks)

Module-2

3 a. Draw a use case diagram which demonstrates the usage of library management system. (08 Marks)

b. Identify the differences between user and system requirements. (06 Marks)

c. Discuss on activity diagram in detail. (06 Marks)

OR

4 a. Construct a use case diagram for online shopping system. (08 Marks)

b. Explain each and every step in requirements elicitation. (06 Marks)

c. Elaborate on state transition diagram briefly. (06 Marks)

Module-3

5 a. Write short notes on tool set of agile process. (07 Marks)

b. Brief the scrum concept along with scrum roles and events. (07 Marks)

c. Identify the core principles in software engineering and explain them in detail. (06 Marks)

OR

6 a. Discuss on extreme programming along with the Xp rules. (07 Marks)

b. What is Agility? Explain the cost of curve in agile. (07 Marks)

c. Explain Agile principles in detail (06 Marks)

Module-4

7 a. Explain the characteristics of the project. (06 Marks)
b. Discuss the different ways of categorizing software project. (07 Marks)
c. Elaborate on software project v/s other engineering projects. (07 Marks)

OR

8 a. Discuss criteria's and factors of a project success and project failure. (07 Marks)
b. Differentiate between traditional v's modern project management practices. (06 Marks)
c. Explain different phases of project management life cycle. (07 Marks)

Module-5

9 a. Explain software quality dimensions/parameters and factors affecting software quality. (07 Marks)
b. With a neat diagram, explain place of software quality in project management. (07 Marks)
c. Discuss on techniques that enhances software quality. (06 Marks)

OR

10 a. Demonstrate the usage of Mccall Software quality model. (06 Marks)
b. Elaborate on Capability Maturity Model (CMM) in detail. (07 Marks)
c. Explain levels of testing and testing activities. (07 Marks)

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