

R18

Code No: 157DX

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, February - 2025
SOFTWARE PROCESS AND PROJECT MANAGEMENT
(Common to CSE, IT, ITE, CSE(N))

Time: 3 Hours

Max.Marks:75

Note: i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A

(25 Marks)

- 1.a) Distinguish between software process and software project. [2]
- b) Define Initial Process. What are its characteristics? [3]
- c) What are the principles of modern software management? [2]
- d) Provide the ways of reducing Software Product Size. [3]
- e) What are the differences in engineering and production stages? [2]
- f) What are the sequence of life-cycle check points in major milestones? [3]
- g) Define process automation. [2]
- h) What are the key practices that improve overall software quality? [3]
- i) State the advantages of Next-Generation software Economics. [2]
- j) What are the Profiles of Modern Project? [3]

PART – B

(50 Marks)

- 2.a) What are process reference models? Explain any two of them.
- b) Explain about the Optimizing Process in details. [5+5]

OR

- 3.a) Explain the differences between Continuous and Staged Representations of CMMI.
- b) Explain different principles covered by Software maturity Framework. [5+5]

- 4.a) Why the Elaboration phase? Discuss the primary objectives of it and provide the essential activities of Elaboration phase.
- b) Explain the predominant cost estimation process. [5+5]

OR

- 5.a) Explain with a neat diagram how various artifacts evolved over the life cycle.
- b) Describe in detail about Engineering and production stage. [5+5]

- 6.a) Explain in detail about seven top-level workflows.
- b) Discuss briefly about Work break down structure. [5+5]

OR

- 7.a) Describe the different iteration emphasis across the life cycle.
- b) Explain cost and schedule estimation process. [5+5]

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8.a) Describe about Pragmatic software metrics.

b) Explain Project Control and process instrumentation in detail.

[5+5]

9.a) Write down the top-level use case which describes the basic operational concept for an Software Project Control Panel (SPCP).

b) How can we handle small-scale and large scale project effectively? How they are differ with each other in terms of schedule distribution, workflow and artifacts.

[5+5]

10.a) Discuss clearly the activities of software management team, software architecture team, and the software development team.

b) Explain the overview of CCPDS-R life cycle.

[5+5]

OR

11.a) Describe about Future Software Project Management Practices.

b) How we can categorize modern iterative development process framework and conventional software process.

[5+5]

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