

R18

Code No: 157DX

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, July/August - 2023

SOFTWARE PROCESS AND PROJECT MANAGEMENT

(Common to CSE, IT, ITE)

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) List the levels of CMM models. [2]
- b) What is Personal Software Process? [3]
- c) How has Software Economics evolved over time? [2]
- d) Mention the primary objectives of the Inception Phase. [3]
- e) Give the purpose of Periodic Status Assessments in the software process. [2]
- f) List the issues of Conventional work breakdown structures. [3]
- g) What are Pragmatic Software Metrics? [2]
- h) What are the things that are necessary to define and develop to implement a complete SPCP? [3]
- i) Give the significance of CCPDS-R in software project management? [2]
- j) What is meant by Early Risk resolution? [3]

PART – B

(50 Marks)

- 2.a) Discuss briefly Software Process Maturity Framework. [5+5]
 - b) What are Process Reference models? Explain about PCMM. [5+5]
- OR**
- 3.a) Discuss about Software Process Assessment Cycle. [5+5]
 - b) Discuss on Process reference model CMMI. [5+5]
- 4.a) Explain about different stages in the Software Development Process.
 - b) Discuss on the principles of Conventional software engineering proposed by Davis. [5+5]

OR

5. Explain about Model-Based Software Architecture and its two different architectural perspectives. [10]
6. Define Software Process Workflow and explain the seven top-level workflows in detail. [10]

OR

- 7.a) Explain in briefly about Minor milestones.
- b) Discuss the purpose of the Iteration Readiness Review and the Iteration Assessment Review in software project management. [4+6]

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8.a) Write a note on Pragmatic Software Metrics and explain its Basic characteristics.

b) Discuss why the Values of metrics should be interpreted correctly. [5+5]

OR

9.a) Discuss the benefits and challenges of Automating Metrics Collection and Analysis in software project management.

b) Explain how metrics automation can improve the Accuracy, Efficiency, and Timeliness of project performance measurement. [5+5]

10.a) Define the COCOMO model and mention its advantages and drawbacks.

b) Discuss in brief about Next generation software economics. [5+5]

OR

11.a) How can organizations effectively manage the Transition from Traditional to Modern processes? Highlight the potential risks and rewards associated.

b) What are the Software Management best practices? Explain. [5+5]

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