

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech. IV Year I Semester Regular & Supplementary Examinations December-2024
SOFTWARE PROCESS & PROJECT MANAGEMENT
(Computer Science & Information Technology)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

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|---|--|-----|----|----|
| 1 | a How do The Initial Process and The Repeatable Process differ in the software development? Explain. | CO1 | L3 | 6M |
| | b Explain the Software Maturity Framework and its significance in software development processes. | CO1 | L4 | 6M |

OR

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|---|--|-----|----|----|
| 2 | a List and explain the different Process reference models. | CO1 | L4 | 6M |
| | b Explain structure of PSP. | CO1 | L3 | 6M |

UNIT-II

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|---|---|-----|----|----|
| 3 | a Discuss the engineering and production stages in the software development life cycle. | CO2 | L3 | 6M |
| | b Explain the Elaboration phase in detail. | CO2 | L2 | 6M |

OR

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|---|--|-----|----|----|
| 4 | a What role do artifact sets play in the software development life cycle? Explain. | CO2 | L3 | 6M |
| | b Differences between engineering artifacts and pragmatic artifacts. | CO2 | L4 | 6M |

UNIT-III

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|---|---|-----|----|----|
| 5 | a Describe a typical software process workflow, highlighting key stages and activities. | CO3 | L3 | 6M |
| | b Explain Iteration's workflow in detail. | CO3 | L3 | 6M |

OR

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|---|--|-----|----|----|
| 6 | a What role does the cost and schedule estimating process play in project planning? Explain. | CO3 | L3 | 6M |
| | b Discuss the pragmatic planning in the software development. | CO3 | L4 | 6M |

UNIT-IV

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|---|---|-----|----|----|
| 7 | a How do project organizations differ from traditional line-of-business structures? | CO4 | L3 | 6M |
| | b What are the key advantages and challenges associated with project organizations? | CO4 | L3 | 6M |

OR

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|---|---|-----|----|----|
| 8 | a Explain about the seven-core metrics related to project control. | CO4 | L3 | 6M |
| | b Share examples of specific pragmatic software metrics and their application in real-world projects. | CO4 | L4 | 6M |

UNIT-V

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|---|---|-----|----|----|
| 9 | a What are the major lessons learned from the CCPDS-R case study? | CO5 | L3 | 6M |
| | b Describe overview of the objectives and scope of the CCPDS-R project. | CO5 | L2 | 6M |

OR

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|----|--|-----|----|----|
| 10 | a What characterizes next-generation software economics in the project management? Explain. | CO5 | L3 | 6M |
| | b What are the key benefits and challenges associated with implementing Agile and DevOps methodologies? Discuss. | CO5 | L4 | 6M |

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1. Introduction

The purpose of this document is to provide a comprehensive overview of the project's objectives and scope. It is intended for the project team and stakeholders.

64