

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

**B.Tech. IV Year I Semester Regular & Supplementary Examinations October/November-2025**

**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 | What are different Process reference models and explain in detail?  | CO1 | L3 | 6M |
|   | b | Compare and contrast the Capability Maturity Model (CMM) with the Capability Maturity Model Integration (CMMI). | CO1 | L4 | 6M |

**OR**

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|---|---|---|-----|----|----|
| 2 | a | How does TSP differ PSP, and what advantages does it offer for team-based projects? | CO1 | L3 | 6M |
|   | b | Explain structure of PSP in detail.   | CO1 | L2 | 6M |

**UNIT-II**

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|---|---|--|-----|----|----|
| 3 | a | Explain the Principles of Conventional Software Management                                   | CO2 | L4 | 6M |
|   | b | Define Waterfall Model in detail? Illustrate Five necessary improvements for waterfall model | CO2 | L3 | 6M |

**OR**

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|---|---|--|-----|----|----|
| 4 | a | Explain practice the conventional software management approach.  | CO2 | L4 | 6M |
|   | b | What are the distinguishing features between the old way and the new way in software project management? | CO2 | L2 | 6M |

**UNIT-III**

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|---|---|--|-----|----|----|
| 5 | a | What is the significance of software process workflows in the development life cycle?          | CO3 | L4 | 6M |
|   | b | What distinguishes Minor milestones from Major milestones in the software development process? | CO3 | L2 | 6M |

**OR**

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|---|---|--|-----|----|----|
| 6 | a | Can you provide examples of tools or methodologies used in iteration planning? | CO3 | L3 | 6M |
|   | b | Explain the pragmatic planning in the software development.                    | CO3 | L4 | 6M |

**UNIT-IV**

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|---|--|--|-----|----|-----|
| 7 |  | Explain about the seven-core metrics related to project control. | CO4 | L3 | 12M |
|---|--|--|-----|----|-----|

**OR**

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|---|---|--|-----|----|----|
| 8 | a | How have organizations evolved over time in response to changes in project management practices? | CO4 | L3 | 6M |
|   | b | What are the key advantages and challenges associated with project organizations?                | CO4 | L3 | 6M |

**UNIT-V**

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|---|---|---|-----|----|----|
| 9 | a | How were traditional project management practices applied in the CCPDS-R case study?                | CO5 | L2 | 6M |
|   | b | Explain the specific tools or platforms that have become instrumental in modern project management. | CO5 | L3 | 6M |

**OR**

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|----|--|--|-----|----|-----|
| 10 |  | Explain the specific project management methodologies used in CCPDS-R. | CO5 | L2 | 12M |
|----|--|--|-----|----|-----|

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