Code No: R194105E   **R19**   Set No. 1

IV B.Tech I Semester Regular Examinations, November – 2022
SOFTWARE PROJECT MANAGEMENT
(Computer Science and Engineering)

Time: 3 hours   Max. Marks: 75

Answer any FIVE Questions
ONE Question from Each unit
All Questions Carry Equal Marks
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UNIT-I

1 a) Explain three different process perspectives and their attributes.   [7]
   b) Discuss the pragmatic software cost estimation process.   [8]
                                    (OR)
2 a) Describe the role of peer reviews in improving software economics.   [7]
   b) List and explain any eight principles of conventional software   [8]
       engineering proposed by Davis.

UNIT-II

3 a) How an operational artifact of a management set differs from planning   [7]
       artifacts? Explain
   b) Explain any ten principles of conventional software Engineering.   [8]
                                    (OR)
4 a) Discuss the principles of modern software management.   [7]
   b) Write a short note on life cycle phases.   [8]

UNIT-III

5 a) Define the terms 'model' and 'view'. What are the three different   [7]
       aspects of software architecture from the management's perspective?
   b) Explain the significance of software architecture in the modern software [8]
       development process.
                                    (OR)
6   What are the four major mile stones that assist project manage in   [15]
       achieving good quality? Explain each.

7 a) Discuss the iteration planning process.   [7]
   b) Discuss the three levels of the process along with their automation   [8]
       support.

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(OR)

8   What are WBS? Explain its categories. How WBS assist in project [15] planning.
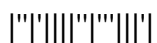
UNIT-V

9   a)   What is the need of automation. Discuss the Automation Building [7] blocks.

     b)   Explain the Critical Path Analysis with an example.   [8]

(OR)

10   a)   What is the need for metrics? What do you mean by indicators? [7] Explain.

     b)   Why are the metrics divided into management and quality indicators? [8] Name the core metrics under each category.

Code No: R194105E **R19** Set No. 2

IV B.Tech I Semester Regular Examinations, November – 2022
SOFTWARE PROJECT MANAGEMENT
(Computer Science and Engineering)

Time: 3 hours **Max. Marks: 75**

Answer any FIVE Questions
ONE Question from Each unit
All Questions Carry Equal Marks
*****

UNIT-I

1. a) What constitutes a good software cost estimate? Explain the cost estimation process. [7]
   b) Explain about progress profile of a conventional software project with a neat diagram. [8]

(OR)

2. a) How Software Project Management differs from traditional project management? Explain [7]
   b) Discuss in detail the initial process, the repeatable process, and the managed process. [8]

UNIT-II

3. a) Explain any four management artifacts with their formats. [7]
   b) Compare and contrast the inception phase and Elaboration phase. [8]

(OR)

4. a) Describe any four Engineering artifacts with their formats. [7]
   b) Explain the primitive components of a software change order in project environment. [8]

UNIT-III

5. a) Explain the seven workflows in the life cycle. [7]
   b) Discuss typical minor milestones in the life cycle of iteration. [8]

(OR)

6. Define iteration. Discuss the sequence of activities in an iteration workflow. [15]

UNIT-IV

7. a) Explain the main features of the default line-of-business organization. [7]
   b) Project planning need to be derived from two perspectives. Explain them. [8]
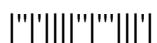
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(OR)

8   What are the four component teams in a default line-of-business   [15]

organizations? Give their responsibility?

UNIT-V

9 a)   Compare and contrast CPM method with PERT method.   [7]

   b)   Discuss in detail the three fundamental sets of management metrics.   [8]

(OR)

10 a)   Give the reasons for selecting the seven core metrics in the software life   [7]
       cycle. Also, discuss the evolutionary pattern of life cycle metrics

   b)   Explain the life cycle expectations in Software Project Management.   [8]

Code No: R194105E **R19** Set No. 3

IV B.Tech I Semester Regular Examinations, November – 2022
SOFTWARE PROJECT MANAGEMENT
(Computer Science and Engineering)

Time: 3 hours   Max. Marks: 75

Answer any FIVE Questions
ONE Question from Each unit
All Questions Carry Equal Marks
*****

UNIT-I

1 a) Discuss the improving software processes.   [5]
   b) Explain the conventional software Management performance principles.   [10]

(OR)

2 a) Explain the waterfall model. What are the necessary improvements for   [7]
        this model?
   b) Illustrate different parameters of the software cost model and how they   [8]
        are used in improving software economics.

UNIT-II

3 a) Give an overview of the artifact sets. Also, explain the artifacts in the   [7]
        management set.
   b) Give the primary objectives and essential activities of construction   [8]
        phase.

(OR)

4 a) Explain the programmatic artifacts.   [7]
   b) What is meant by the Elaboration phase? Discuss the primary objectives   [8]
        and essential activities of the Elaboration phase.

UNIT-III

5 Discuss the Major milestones and Minor Milestonesin software project   [15]
   management.

(OR)

6 What is a workflow? How is it different from artifact? Give its   [15]
   classification.

UNIT-IV

7 Elaborate on the roles and responsibilities of line of business   [15]
   organizations with a neat diagram.

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(OR)

8   Compare and contrast the engineering stage and production storage   [15]
planning.

UNIT-V

9   Discuss the role of COCOMO model in a project estimation.Give its   [15]
variants.

(OR)

10   a)   Explain the PERT technique with an example.   [7]

    b)   List and explain any four characteristics of a good software metric.   [8]

Code No: R194105E **R19** Set No. 4

IV B.Tech I Semester Regular Examinations, November – 2022
SOFTWARE PROJECT MANAGEMENT
(Computer Science and Engineering)

Time: 3 hours   Max. Marks: 75

Answer any FIVE Questions
ONE Question from Each unit
All Questions Carry Equal Marks
*****

UNIT-I

1 a) What are the top ten risks in the conventional process of software [7]
      development? Explain.
   b) Discuss the results of conventional software project design reviews.   [8]
                                    (OR)
2 a) List and explain the five components of software cost models.   [7]
   b) Explain the water fall model with late design breakage and late risk [8]
      resolution.
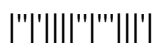
UNIT-II

3 a) Distinguish between the old way and the new way of software project [7]
      management.
   b) Discuss briefly the Engineering artifact sets.   [8]
                                    (OR)
4 a) Give the artifact distribution across life cycle phases.   [7]
   b) Discuss the primary objectives and essential activities of transition [8]
      phases.

UNIT-III

5   What is meant by a checkpoint? Give its classification. Explain briefly [15]
     about periodic status assessment.
                                    (OR)
6 a) What are the major milestones in a software project life cycle? Explain.   [7]
   b) Discuss the Iteration workflows.   [8]

UNIT-IV

7 a) Two simple planning guidelines must be considered during project [7]
      initiation and assessment'. Discuss them briefly.
   b) How should the evolutionary WBS be structured? Explain.   [8]

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(OR)

8 a) Discuss the two perspectives of deriving project plans.   [7]
   b) Give the roles and responsibilities of project organizations.   [8]

UNIT-V

9 a) Discuss the life cycle expectations in software project management.   [7]
   b) Describe the pragmatic Software Metrics.   [8]

(OR)

10   Elaborate on the Project Estimation and Management   [15]