# **R16**

#### Code No:R164105E

Set No. 1

## IV B.Tech I Semester Regular Examinations, October/November - 2019 SOFTWARE PROJECT MANAGEMENT

(Common to Computer Science and Engineering and Information Technology)
Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B Answer ALL sub questions from Part-A Answer any FOUR questions from Part-B \*\*\*\*\*

| 1. | <ul><li>a)</li><li>b)</li><li>c)</li><li>d)</li><li>e)</li><li>f)</li></ul> | Define the usual stages of a software project.  Explain about the inception phase.  What are the three modes of COCOMO model?  List the factors used to identify the risk.  Define earned value. Give the Formula.  Give some examples of quality standards. | [3]<br>[2]<br>[3]<br>[2]<br>[2]<br>[2] |
|----|---|--|--|
|    | ,   |  | . ,                                    |
| 2. | a)<br>b)  | PART-B(4x14 = 56 Marks) With a neat diagram explain project control cycle in detail. Explain the activities involved to identify the scope and objectives of a project.  | [7]<br>[7]                             |
| 3. | a)<br>b)  | Describe in detail about incremental developmental model. Illustrate the artifacts evolution over life cycle.  | [7]<br>[7]                             |
| 4. | a)<br>b)  | Discuss about various software metrics used in the estimation. What is function point estimation? Explain the steps involved in computing the function paths with example.   | [7]<br>[7]                             |
| 5. |   | Describe with an example how the effect of risk on project schedule is evaluated using PERT.   | [14]                                   |
| 6. | a)<br>b)  | What are the different types of visualizing progress explain in detail? Explain in detail about the concept of resource scheduling.  | [7]<br>[7]                             |
| 7. | a)<br>b)  | What do you understand by the term quality? Define the software quality and its importance. Write the difficulties in implementing software quality standards.   | [7]<br>[7]                             |

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#### Code No: **R164105E**

Set No. 2

## IV B.TechI Semester Regular Examinations, October/November - 2019 SOFTWARE PROJECT MANAGEMENT

(Common to Computer Science and Engineering and Information Technology)
Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B Answer ALL sub questions from Part-A Answer any FOUR questions from Part-B \*\*\*\*\*

| 1. | a) | Define the scope of software project management.                                | [3]  |
|----|----|---|------|
|    | b) | Explain about the elaboration phase.  | [2]  |
|    | c) | Briefly discuss about critical path analysis.                                   | [3]  |
|    | d) | Define risk management.   | [2]  |
|    | e) | Define resource allocation.   | [2]  |
|    | f) | Differentiate between ISO and CMM.  | [2]  |
|    |    | PART-B(4x14 = 56 Marks)   |      |
| 2. | a) | Explain the main elements involved in the role of management.                   | [7]  |
|    | b) | Elaborate the process of analyzing the project characteristics.                 | [7]  |
| 3. | a) | Describe in detail about management artifacts.                                  | [7]  |
|    | b) | Illustrate about the concept of choosing technology in a project.               | [7]  |
| 4. |    | Compare and contrast various issues and factors of COCOMO model with other      |      |
|    |    | levels of COCOMO models.  | [14] |
| 5. | a) | Briefly explain the steps involved in risk planning in project development.     | [7]  |
|    | b) | Write short notes on Software Project risks and strategies for risk reduction.  | [7]  |
| 6. | a) | Explain Framework for Project Management and control.                           | [7]  |
| 0. | b) | Give an example to explain how to identify the resource requirements?           | [7]  |
| 7. | a) | What are the different parameter for measuring the quality of software project? | [7]  |
| ٠. | h) | Elaborate various quality standards and state its uses.                         | [7]  |

# IV B.TechI Semester Regular Examinations, October/November - 2019 SOFTWARE PROJECT MANAGEMENT

(Common to Computer Science and Engineering and Information Technology)
Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B Answer ALL sub questions from Part-A Answer any FOUR questions from Part-B \*\*\*\*\*

| 1. | <ul><li>a)</li><li>b)</li><li>c)</li><li>d)</li><li>e)</li><li>f)</li></ul> | Differentiate between software project and other type of projects.  Explain about the construction phase.  Discuss about SLOC.  What are the main components of the risk management?  What are the Common methods for assigning earned value in software projects?  What are the objectives of quality models? | [3]<br>[3]<br>[2]<br>[2]<br>[2] |
|----|---|--|---------------------------------|
|    |   | PART-B(4x14 = 56 Marks)  |                                 |
| 2. | a)  | With a neat diagram explain typical project life cycle in detail.  | [7]                             |
|    | b)  | List the products created by the step wise planning process.   | [7]                             |
| 3. | a)  | Describe in detail about pragmatic artifacts.  | [7]                             |
|    | b)  | Illustrate in detail about the project workflows.  | [7]                             |
| 4. |   | Consider a library management system with functionalities for inquires, rentals return, reservation and fee collection. Using COCOMO technique estimate the effort required for developing the system. State the assumptions made in the estimation?   | [14]                            |
| 5. | a)<br>b)  | Explain the use of checklist and brainstorming in identification of risks. How does a PERT analysis improves planning and decision making in project management.   | [7]                             |
|    |   |  | [7]                             |
| 6. |   | Outline the use of Gantt charts and timeline charts in visualizing project progresswith suitable diagrams.   | [14]                            |
| 7. | a)<br>b)  |  | [7]                             |
|    |   |  | [7]                             |

# **R16**

Code No: **R164105E** 

Set No. 4

## IV B.TechI Semester Regular Examinations, October/November - 2019 SOFTWARE PROJECT MANAGEMENT

(Common to Computer Science and Engineering and Information Technology)
Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B Answer ALL sub questions from Part-A Answer any FOUR questions from Part-B \*\*\*\*\*

| 1. | <ul><li>a)</li><li>b)</li><li>c)</li></ul> | What are the major objectives of software project planning? Explain about the transition phase. Why do we need to consider cost drivers in COCOMO estimation? | [2]<br>[3]<br>[3] |
|----|--|---|-------------------|
|    | d)   | What do you understand by risk transfer? Give an example.   | [2]               |
|    | e)   | What are the levels of prioritizing monitoring?   | [2]               |
|    | f)   | List the levels in capability maturity model.   | [2]               |
|    |  | PART-B(4x14 = 56 Marks)   |                   |
| 2. | a)   | List and explain the problems with software management.   | [7]               |
|    | b)   | Describe the activities involved in identifying the project infrastructure.   | [7]               |
| 3. | a)   | Describe in detail about engineering artifacts.   | [7]               |
|    | b)   | How is the basic system life cycle model affect the goal and scope of the software project?   | [7]               |
| 4. | a)   | Give an example to explain use case based estimation.   | [7]               |
|    | b)   | Illustrate the COCOMO estimation using an example of your choice.   | [7]               |
| 5. |  | Explain how you will identify the major risks, & identify the strategies for minimizing each of those risks?  | [14]              |
| 6. | a)   | Why scheduling resource is an important task in software project management?  | [7]               |
|    | 1- \                                       | Give any four reasons.  | [7]               |
|    | b)   | Explain in detail about the concept of cost monitoring.   | [7]               |
| 7. | a)   | Describe in detail about ISO 9016 for measuring the software quality.   | [7]               |
|    | b)   | Explain the strategic objectives, practices for capability maturity model.  | [7]               |