**Sub Code: RIT051**

**Paper Id:** | **113501** |         **Roll No:** | | | | | | | | | | | |

# B. TECH.
## (SEM V) THEORY EXAMINATION 2019-20
## SOFTWARE PROJECT MANAGEMENT

*Time: 3 Hours*                                                      *Total Marks: 70*

**Note 1.** Attempt all Sections. If require any missing data; then choose suitably.

### SECTION A

1. **Attempt all questions in brief.**                                 **2 x 7 = 14**
   a. List the qualities required for project manager.
   b. Define CMM.
   c. Differentiate CPI and SPI.
   d. Discuss MS Project.
   e. Define activity-on-Arrow. State its use in project management.
   f. What is earned value analysis?
   g. State the purpose of statement of work.

### SECTION B

2. **Attempt any *three* of the following:**                           **7 x 3 = 21**
   a. How do we measure productivity? How does team structure affects productivity?
   b. Is the critical path important if only one person is working on a software project? Discuss the concept of PERT/CPM in defining an optimal schedule.
   c. Discuss cost benefit analysis in details. What are the following terms: net profit value, return on investment, and payback period?
   d. Discuss software project management. What are the need for SPM? Explain Structure of a Software Project Management Plan.
   e. Explain with example how gantt chart is useful for project manager.

### SECTION C

3. **Attempt any *one* part of the following:**                        **7 x 1 = 7**
   (a) Discuss and differentiate Project Life Cycle and Product Life Cycle with example.
   (b) Explain following term: SPM framework with example, project estimation model, milestone chart

4. **Attempt any *one* part of the following:**                        **7 x 1 = 7**
   (a) What do you mean by work breakdown structure (WBS) in context to software project and product? Discuss with examples. How it is useful for project manager?
   (b) What are the Dimensions of Project Monitoring & Control? Discuss using example.

5. **Attempt any *one* part of the following:**                        **7 x 1 = 7**
   (a) Discuss about software quality factors and attributes.
   (b) Discuss Interpretation of Earned Value Indicators. Write short notes on Error Tracking, Cost Variance, and Pair programming.

6. **Attempt any *one* part of the following:**                        **7 x 1 = 7**
   (a) What is critical path method? Write the advantages and disadvantages of critical path method. How we identify the critical path. Explain.
   (b) Explain SEI capability maturity model. How does it differ from ISO 9000?

7. **Attempt any *one* part of the following:**                        **7 x 1 = 7**
   (a) Discuss important point's specific for identifying the risk during software development. Also, give some of the category of risk that are to be identified.
   (b) What do you understand by CASE tools? Explain in details.