B.Tech

(SEM -VII) THEORY EXAMINATION 2018-19 SOFTWARE PROJECT MANAGEMENT

Time: 3 Hours Total Marks: 100

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

SECTION A

1. Attempt all questions in brief.

 $2 \times 10 = 20$

- a. Differentiate between task and activities.
- b. Define the term Project and Management
- c. What are Risk assessment activities?
- d. How does software project different from other engineering project?
- e. Differentiate between test plan and test cases
- f. Give your understanding about Automation Testing?
- g. What are the advantages of pair programming?
- h. How is CPI different from SPI?
- i. What is Black Box testing?
- j. What is Desk Checking?

SECTION B

2. Attempt any *three* of the following:

 $10 \times 3 = 30$

- a) What do you mean by work breakdown structure in context software project and product? Discuss with example.
- b) Describe the characteristics of a good software metric. Also discuss various software metrics for Project Monitoring
- c) Elaborate on the planning and organizing for Software Configuration Management (SCM) which includes potential SCM problem classes, staffing and tools. Also state the benefits of SCM process and tools.
- d) Explain the SEI/CMM Process model with its maturity levels and the key process areas for each level?
- e) Discuss briefly about Earned Value Indicators?

SECTION C

3. Attempt any *one* of the following:

 $10 \times 1 = 10$

- a) What is the difference between project life cycle and product life cycle?
- b) Briefly explain COCOMO model for cost estimation for all category of projects

4. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- a) Write short note on SPI & CPI?
- b) What do you mean by software review? Why it is important? What are different types of reviews?

5. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- a) What are software testing objectives? Discuss different types & levels of testing in details?
- b) What do you mean by proof of correctness? Also discuss the difference between code inspection and code walkthrough?

6. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- a) What do understand by software configuration management? What are the various configuration items and task? Discuss with suitable example.
- b) With a suitable illustration, how risk management is managed during critical part in software project management?

7. Attempt any *one* part of the following:

 $10 \times 1 = 10$

- a) Describe the Putnam Model of software estimation?
- b) Explain with examples the scheduling fundamental. Explain PERT scheduling in terms of network diagram with neat sketches?

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