B. Tech.
(SEM. VI) THEORY EXAMINATION 2017-18
SOFTWARE PROJECT MANAGEMENT

Time: 3 Hours   *Total Marks: 100*

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

SECTION A

1.   Attempt *all* questions in brief.   **2 x 10 = 20**

a.   What is "software safety?
b.   What do you mean by operational feasibility?
c.   Write the role of project manager.
d.   What are the difference between formal reviews and informal reviews?
e.   Write the goals of software testing.
f.   What are the different activities of project management?
g.   Define stake holders?
h.   How plans, methods and methodologies differ from each other?
i.   List the characteristics of software projects.
j.   Define pair programming.

SECTION B

2.   Attempt any *three* of the following: **10 x 3 = 30**

a.   What is management spectrum? Discuss 4 P's of management spectrum.

b.   Define "work breakdown structure (WBS)". Explain the types of work breakdown structure. Also describe WBS activities and tasks.

c.   What do you understand by CASE tools? Explain in details.

d.   List and discuss some of the point specific for identifying the risks during software development. How we manage various types of risk in software project.

e.   Write short notes on following-
     i. Static Testing vs. Dynamic Testing
     ii. Black box testing vs. White box testing

SECTION C

3.   Attempt any *one* part of the following: **10 x 1 = 10**

(a)   What is scope of a project? Explain with example.

(b)   What do you understand by the term "LIFE CYCLE"? Illustrate different phases of project management life cycle.

4.   **Attempt any *one* part of the following:**   **10 x 1 = 10**

   (a)   What is "critical path method (CPM)? Write the advantages and disadvantages
of CPM. How we identify the critical path.

   (b)   What is SQA? Develop your own metrics correctness, maintainability, integrity
and usability of software.

5.   **Attempt any *one* part of the following:**   **10 x 1 = 10**

   (a)   Explain different levels of testing.

   (b)   What is SEI Capability Maturity Model (CMM)?

6.   **Attempt any *one* part of the following:**   **10 x 1 = 10**

   a.   Discuss the role of the cost estimation in software development project.
Briefly explain COCOMO model for cost estimation for all categories of
project.

   b.   What are the different techniques for project monitoring and control?

7.   **Attempt any *one* part of the following:**   **10 x 1 = 10**

   (a) Create a project control cycle for library management system.

   (b) Define software configuration management. Explain in detail the SCM items and
tasks.