(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2526 Roll No. | | | | | | | | | |

B. Tech.

(SEM. VI) THEORY EXAMINATION 2010-11
SOFTWARE PROJECT MANAGEMENT

Time : 3 Hours   *Total Marks : 100*

Note : Attempt **all** questions.

1. Answer any **two** parts :   (10×2=20)

    (a) What do you understand by software project planning ?
         What are the various planning objectives ? Also discuss
         various types of project plans with suitable example.

    (b) Write short notes on the following with suitable example :

         (i)   Software project estimation models

         (ii) Structure of a software project management plan.

    (c) Describe the following :

         (i)   Vision and scope document

         (ii)   Management Spectrum

         (iii) SPM framework

         (iv)   Decision Process.

2. Answer any **two** parts : (10×2=20)

(a) What do you understand by work break structure (WBS) ? What are the various types of WBS ? What is the role of WBS directory and what the contents of it ? Explain.

(b) (i) What is the difference between the project life cycle and product life cycle ? Discuss.

(ii) Write a short note on organizational behavior.

(c) What do you mean by project scheduling ? What are the scheduling objectives ? How to build the project schedule ?

3. Answer any **two** parts : (10×2=20)

(a) What is the significance of project monitoring and control ? What are the various dimensions of project monitoring and control ? Does monitoring and control affect the project schedule ? Discuss.

(b) (i) What do you understand by schedule performance index (SPI) ? Discuss.

(ii) What do you mean by software review ? What is the significance of software reviews in software project management ?

(c) Write short notes on the following with examples :

(i) Code Review

(ii) Error Tracking.

4. Answer any two parts :
(10×2=20)

(a) (i) What is software testing ? What are software testing objectives ? Discuss various types of testing in detail.

(ii) Write a short note on testing automation and testing tools.

(b) (i) What is the difference between testing principles and testing strategies ? Discuss.

(ii) What is the difference between program verification and program validation ? Explain the life cycle verification approach with suitable diagram.

(c) (i) Write a short note on SEI capability maturity model (CMM).

(ii) Explain the term statistical quality assurance and clean room process.

5. Answer any two parts :
(10×2=20)

(a) What do you understand by software configuration management (SCM) ? What are various software configuration items and tasks ? Discuss with suitable example.

(b) Describe the following with example :

(i) Risk breakdown structure (RBS)

(ii) Cost benefits analysis.

(c) What is the role of a software project management tool ? Describe any software project management tool in detail.