

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

PAPER ID : 2526

Roll No.

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**B.Tech.**

(SEM. VI) THEORY EXAMINATION 2011-12

**SOFTWARE PROJECT MANAGEMENT**

Time : 3 Hours

Total Marks : 100

Note :— Attempt *all* questions.

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

(a) Define software project management. Describe the software project management cycle in detail with suitable diagrams.

(b) What do you mean by function points (FPs) ? Why FPs are becoming acceptable in industry ? Also compute the function point value for a project with the following information domain characteristics :

Number of user inputs = 30

Number of user outputs = 42

Number of user enquiries = 08

Number of files = 07

Number of external interfaces = 06

Assume that all complexity adjustments values are moderate.

(c) (i) Write short note on the COCOMO Model.

(ii) How planning for a software project is different from planning for any other engineering project ?

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

(a) Describe the following with example and also give the significance of each :

(i) PERT

(ii) CPM.

(b) (i) What is the difference between the milestone chart and Gantt chart ? Discuss.

(ii) Discuss various steps to select software project team.

(c) (i) What is motivation ? Describe some models of motivation.

(ii) How to build a project schedule ? Explain.

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

(a) What is meant by earned value analysis and earned value indicators ? What is the significance of these ? Discuss various earned value indicators with examples.

(b) (i) What do you mean by error tracking ? Explain with examples. Does it affect the SPM schedule ?

(ii) Write a short note on pair programming.

(c) What do you mean by the software reviews ? How software review is carried out ? Discuss any two software review methods.

4. Answer any *two* parts :—

(10×2=20)

(a) What is the difference between white box and black box testing ? Is determining test cases easier for black box testing or white box testing ? Discuss with some example. Is it correct to claim that if white box testing is done properly, it will achieve close to 100% path coverage ? Explain.

(b) (i) Is unit testing possible or even desirable in all circumstances ? Justify your answer with suitable example.

(ii) Differentiate between alpha testing and beta testing.

(c) What do you mean by software quality ? Explain. Discuss various software quality metrics and indicators.

5. Answer any *two* parts :—

(10×2=20)

(a) (i) Discuss the role of change request management in software project management.

(ii) What do you mean by risk ? Is it always necessary to identify the risks in a software project ? Explain.

(b) Describe the following with example :

(i) Baselines

(ii) Risk management process.

(c) Write short notes on the following :—

(i) Role of SCM in SPM

(ii) CASE Tools.