

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

PAPER ID : 0670

Roll No.

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B.Tech.

(SEM VIII) EVEN SEMESTER THEORY EXAMINATION,
2009-2010

SOFTWARE PROJECT MANAGEMENT

Time : 3 Hours

Total Marks : 100

Note : Attempt ALL questions.

1. Answer any two questions : (2x10=20)

- (a) Explain Software Project Planning, giving its various objective. Also discuss the structure of a Software Project Management Plan (SPMP) in detail.
- (b)
 - (i) Explain why the intangibility of software system possess special problems for software project management ?
 - (ii) Discuss the various responsibilities of a software project manager.
- (c) What do you mean by the software project estimation ? Give various estimation models. Describe any one of the estimation model using suitable examples.

2. Answer any two parts : (2x10=20)

- (a) What do you understand by the Activity network and the Gantt chart ? Draw the Activity network and Gantt chart representations for the following table that indicates the various tasks involved in completing a software project, the corresponding activities, and the estimated effort for each task in person-months :

| Tasks | Activity | Efforts in person-months |
|-------|--------------------------------|--------------------------|
| T1 | Requirements specification | 1 |
| T2 | Design | 2 |
| T3 | Code actuator interface module | 2 |
| T4 | Code sensor interface module | 5 |
| T5 | Code user interface part | 3 |
| T6 | Code control processing part | 1 |
| T7 | Integrate and test | 6 |
| T8 | Write user manual | 1 |

- (b) What is the difference between a macroscopic schedule and a detailed schedule ? Is it possible to manage a project if only a macroscopic schedule is developed ? Discuss with suitable example.
- (c) Write short notes on the following :
- (i) Work Breakdown Structure (WBS)
 - (ii) CPM

3. Answer any two parts : (2x10=20)

- (a) What do you mean by earned value analysis and earned value indicators ? Discuss various earned value indicators with examples.

- (b) (i) Discuss error tracking with examples. Does it affect the SPM schedule ? Explain.
- (ii) Discuss the significance of software project reviews.
- (c) Explain the following with examples :
- (i) Code review
 - (ii) Project monitoring and control

4. Answer any two parts : (2x10=20)

- (a) Describe the difference between verification and validation. Do both make use of test case design methods and testing strategies ? Explain with suitable examples.
- (b) (i) Why is a highly coupled module difficult to unit test ? Explain.
- (ii) How can project scheduling affect integration testing ? Discuss.
- (c) Explain the following with examples :
- (i) Software quality attributes
 - (ii) SEI-CMM

5. Answer any two parts : (2x10=20)

- (a) What is the difference between a software configuration management audit and a formal technical review ? Can their functions be folded into one review ? What are the pros and cons ?

- (b) Differentiate between the following with example :
- (i) Known risks and predictable risks.
 - (ii) Change control and version control.
- (c) Write short notes on the following :
- (i) CASE Tools
 - (ii) Risk Monitoring

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