



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

PAPER ID : 0670 Roll No.

B. Tech.

(SEM. VIII) EXAMINATION, 2007-08

SOFTWARE PROJECT MANAGEMENT

Time : 3 Hours]

[Total Marks : 100

Note : Attempt all questions.

1 Attempt any **four** parts of the following : **5×4=20**

- (a) What is Software Project Management (SPM)?
What are the various activities of SPM?
- (b) What do you mean by software project? How does it differ from any other project?
- (c) In reference to project planning, discuss the terms 'milestones' and 'deliverables'?
- (d) What do you mean by stakeholders? Who may be the stakeholders in a software project?
- (e) What is meant by Software Project Estimation? Discuss.
- (f) What is the requirement of having a stepwise project planning?

2 Attempt any **four** parts of the following: **5×4=20**

- (a) What do you mean by Work Breakdown Structure (WBS) in context to software project?



- (b) Discuss in brief:
 - (i) Gantt Chart
 - (ii) Milestone Chart.
- (c) What are the time estimates used in PERT? Briefly discuss their significance.
- (d) What do you understand by the term "Critical path"?
- (e) What are the ways to organize the personnel of a software development organization ?
- (f) Differentiate between 'Process WBS' and 'Product WBS'.

3 Attempt any **two** parts of the following: **10×2=20**

- (a) What do you mean by 'Code Review'? Also discuss the difference between Code Inspection and Code Walkthrough.
- (b) What is meant by 'Error Tracking'? Why is error tracking an excellent management practice ?
- (c) What do you understand by 'Earned Value Analysis'? Discuss the following progress indicators:
 - (i) Cost Variance (CV)
 - (ii) Schedule Performance Index (SPI)
 - (iii) Cost Performance Index (CPI)

4 Attempt any **two** parts of the following : **10×2=20**

- (a) How would you define 'Software Quality'? What do you mean by software quality assurance? Also discuss the various software quality assurance.
- (b) Discuss the SEI Capability Maturity Model in detail.



- (c) Distinguish between software verification and software validation. When, during the software life cycle are verification and validation performed? Can one be used in place of the other?

5 Attempt any **two** parts of the following : 10×2=20

- (a) What is meant by Software Configuration Management? What are the principal activities involved in SCM? Why is SCM crucial to the success of a large software project?
- (b) List the common types of risks that a typical software project might suffer from. If you are the project manager of a large software development project, what steps would you follow to manage risks in your software project.
- (c) What do you understand by the term "CASE" Tools? What are the main advantages of using CASE tools? Also discuss and draw the architecture of a CASE environment.

