

Roll No.

Total Pages : 03

OMCA/D-18

10019

SOFTWARE PROJECT MANAGEMENT
MCA-505(V)

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory.

In addition, attempt exactly *one* question from each Unit. All questions carry equal marks.

(Compulsory Question)

1. (a) Discuss various layers of Software Engineering. 3
- (b) What is Project Decomposition ? 3
- (c) What is Critical Path ? Discuss. 3
- (d) How are recovery plans useful in project tracking ? 3
- (e) Discuss KLOC metric. 3
- (f) What is Maintainability ? 3
- (g) What is Error Tracking ? 3
- (h) Although adding people to a late software project can make it later, there are circumstances in which this is not true ? Describe them. 3

Unit I

2. Discuss the following Evolutionary Process Models
(i) Incremental Model (ii) Spiral Model. Also discuss the strengths and weaknesses of these models. 14
3. (a) Discuss the project management process. What are the phases of management process ? Discuss. 7
(b) How must the people, process and problem be managed during a software project ? 7

Unit II

4. (a) Discuss top down and bottom up planning. What are the advantages and shortcoming of both of them ? 7
(b) Discuss the types of activity relationships. How can the duration of an activity be estimated ? 7
5. (a) What is Activity Responsibility Matrix ? Explain the process of preparing and using the activity responsibility document along with the example. 7
(b) Discuss Project Tracking. Discuss the tracking meeting ground rules. 7

Unit III

6. Differentiate between problem-based and process-based estimation. Discuss the following empirical estimation models : 14
- (a) COCOMO
 - (b) Software Equation.
7. (a) Explain various types of risks and discuss the objectives of risk management. 7
- (b) How does a software team generate reliable estimates of effort, cost and product duration ? 7

Unit IV

8. What is software configuration management process ? Discuss the tasks involved in the process. Also discuss SCM standards. 14
9. (a) What are formal technical reviews ? Why are formal technical reviews so important ? 7
- (b) Discuss the ISO approach to quality assurance systems. Why is it important for a software development organization to obtain ISO 9001 certification ? 7