

**CE1.4-R4 : PROJECT MANAGEMENT****NOTE :**

1. Answer question 1 and any FOUR questions from 2 to 7.
2. Parts of the same question should be answered together and in the same sequence.

**Total Time : 3 Hours****Total Marks : 100**

1. (a) Define Project management. Explain in detail the objectives of Project management.  
 (b) What are the major issues in controlling software engineering project ?  
 (c) Explain the time Quality management.  
 (d) Explain the process of building Software Quality Assurance plan.  
 (e) Explain the function point analysis in detail. Illustrate with an example.  
 (f) What is cyclomatic complexity ? Explain in detail.  
 (g) Briefly describe Contract Drafting and Its Importance. (7x4)
2. (a) What is project management ? Briefly describe the project management framework, providing examples of stakeholders, knowledge areas, tools and techniques, and project success factors.  
 (b) Explain the COCOMO model in detail. (9+9)
3. (a) Define Activity. What is Activity-on-arrow (AOA) and Activity-on-node (AON) ?  
 (b) Highlight the difference between the forward pass and backward pass with a suitable example.  
 (c) Draw the network diagram, and determine the critical path and project completion time for the following project :

Activity	Time estimate (weeks)
1 - 2	5
1 - 3	6
1 - 4	3
2 - 5	5
3 - 6	7
3 - 7	10
4 - 7	4
5 - 8	2
6 - 8	5
7 - 9	6
8 - 9	4

**(6+6+6)**

4. (a) What is the basic requirement of Software Configuration Management (SCM) ?  
How do you plan and organize for SCM ?
- (b) What are the sources of changes ? Why should changes be made in a controlled way ?
- (c) Explain Project scheduling with resource constraints. (8+5+5)
5. Explain the following
- (a) Risk Identification
- (b) Risk Mitigation
- (c) Risk Monitoring
- (d) Risk Management
- (e) Reactive Risk Strategies
- (f) Proactive Risk Strategies (6x3)
6. (a) Discuss the Quality concept. What are the different approaches to achieve quality goals ?
- (b) Describe with an example how the effect of risk on the project schedule is evaluated using PERT.
- (c) A project manager is quantifying risk for her project. Several of her experts are offsite but wish to be included. How can this be done ? (6+6+6)
7. (a) Write a short note on :
- (i) Review process
- (ii) Review committee members and their roles
- (iii) Overview of ISO 9000
- (b) Explain approaches of Software Quality Assurance (SQA).
- (c) Explain various levels of the Capability Maturity Model (CMM) in detail. (9+4+5)

- o O o -