CE1.4-R4: PROJECT MANAGEMENT

NOTE :

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

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

1. (a) Briefly explain contract management and the role of contract manager.
   (b) What is function point? Mention its importance. Write any three advantages of function point analysis.
   (c) Explain what is project status report.
   (d) Explain the difference between forward pass and backward pass.
   (e) What is risk identification? What are the three activities of risk assessment?
   (f) What do you understand by software planning? List the problems faced by software project manager in developing a high quality software project.
   (g) Explain in short Earned Value System.

(7x4)

2. (a) Explain in brief following terms related to software quality: i) quality control, ii) quality plan and iii) TQM.
   (b) What is CMM? Describe its levels & compare it with ISO 9001.

(9+9)

3. (a) Explain in detail the concept of contract monitoring and its purpose.
   (b) Explain the purpose and procedures for operating a configuration management system.

(9+9)

4. (a) What is a successful project? How important are the stakeholders for the success of any project?
   (b) Define development costs. What are the steps in cost-benefit analysis?
   (c) How software project is defined? Why do we need project management?

(6+6+6)

5. (a) Software industry claims that one of the most difficult tasks in software development is project estimation. Explain in short why project estimation is so hard? Also explain following project estimation techniques: expert judgement, bottom up and top down.

(b) Two essential factors for any software development are namely, time and cost. Explain the relationship between time and cost with respect to project management.

(9+9)

6. Using the information in Table below, assuming that the project team will work a standard working week (5 working days in 1 week) and that all tasks will start as soon as possible:

Tasks	Description	Duration (Working days)	Predecessor(s)
A	Requirement Analysis	5	
B	System Design	15	A
C	Programming	25	B
D	Telecoms	15	B
E	Hardware Installation	30	B
F	Integration	10	C , D
G	System Testing	10	E, F
H	Training/Support	5	G
I	Handover and Go-live	5	H

(i) Draw the network diagram.

(ii) Determine the critical path of the project.

(iii) Calculate the planned duration of the project in weeks.

(iv) Identify any non-critical tasks and the float (free slack) on each.

(6+4+4+4)

7. (a) It is well known fact that the driving force behind any successful project is its leader. Describe the qualities of a good leader.

(b) Explain the risk management process in detail. Also discuss what is risk register or log and what it contains.

(c) Explain the concept of Source Code Control System. What are it's applications?

(6+6+6)