

BT-5 / D-19

PROJECT PLANNING AND MANAGEMENT

Paper-CE-309E

Time allowed : 3 hours

[Maximum marks : 100]

Note:- Attempt five questions in all, selecting at least one question from each unit. All questions carry equal marks.

Unit-I

1. (a) State main objectives and functions of construction management. 10
 (b) Discuss resources of construction management. 10
2. (a) Explain different types of specification and their need in construction of project. 10
 (b) Explain Arbitration clause and its benefits. 10

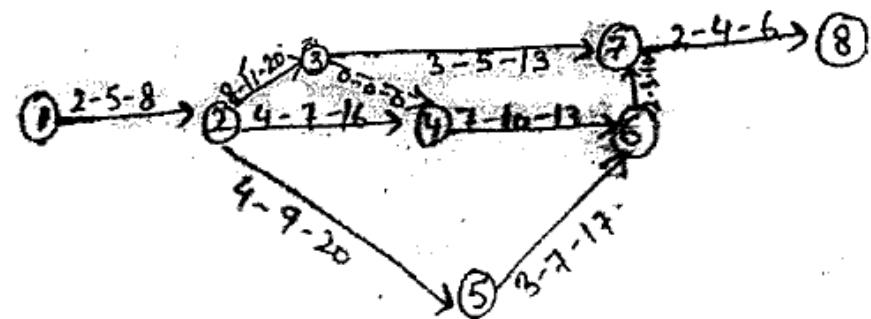
Unit-II

3. (a) Define planning and explain its process. 10
 (b) Elaborate purpose and types of schedule. 10
4. (a) Discuss various principle of organisation. 10
 (b) Enumerate job layout with the help of a line diagram. 10

Unit- III

5. (a) Explain rule for developing network with the help of diagram. 10
 (b) Differentiate PERT and CPM network. 10

6. Network for a construction project, with the three estimates of each activity marked. Determine.
 - (a) Critical Path and its standard deviation
 - (b) Probability of Completion of project in 40 days.
 - (c) Time duration that will provide 95% probability of its completion in time. 20

**Unit-IV**

7. (a) Explain how project cost is calculated? 10
 (b) Define cost optimization and explain how it is done? 10
8. List the non-destructive test for concrete structure and explain any two in detail. 20