

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

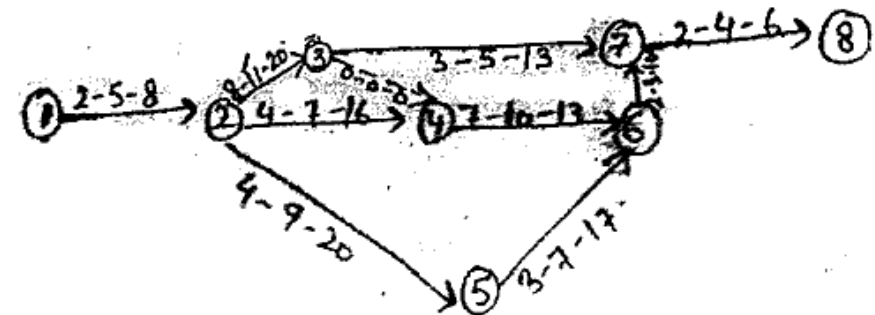
3. (a) Define planning and explain its process. 10
- (b) Elaborate purpose and types of schedule. 10
4. (a) Discuss various principle of organisation. 10
- (b) Enumerate job layout with the help of a line diagram. 10

Unit-III

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

(2)

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