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Eighth Semester B.Arch. Degree Examination, June/July 2019
Project and Construction Management

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

- 1 a. Discuss the important functions of management in context of the construction projects. (10 Marks)
 b. What is project life cycle? Explain the phases of a project life cycle. (10 Marks)

OR

- 2 Elaborate the types of organization structures. Suggest an organization chart for a small construction firm. (20 Marks)

Module-2

- 3 Write short notes on:
 a) Decision tree
 b) SWOT Analysis
 c) Cost-Benefit Analysis
 d) Value Engineering (20 Marks)

OR

- 4 Explain the construction team. Describe the role of each member in the team. (20 Marks)

Module-3

- 5 a. Draw the network of a project whose activities and duration is given below:

Activity	Duration
1 - 2	3
1 - 3	4
1 - 4	14
2 - 6	5
3 - 4	3
3 - 5	4
3 - 6	6
4 - 5	1
5 - 6	1

- b. Determine the earliest and latest start and finish times of each activity.
 c. Find the critical path for the network.
 d. Determine the Total float, free float and independent float for each activity. (20 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
 2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42+8 = 50, will be treated as malpractice.

OR

- 6 a. Draw the network for a construction project whose activities and three time estimates are given below:

Activity	t_0	t_L	t_P
1-2	2	5	8
2-3	8	11	20
3-4	0	0	0
2-4	4	7	16
2-5	4	9	20
4-6	7	10	13
5-6	3	7	17
3-7	3	5	13
6-7	2	3	10
7-8	2	4	6

Normal table values that can be used

Z(+)	Probability %
+1.0	84.13
+1.1	86.43
+1.6	94.52
+1.7	95.54

- b. Find the critical path and its standard deviation.
 c. Probability of completing the project in 40 days.
 d. Time duration that will provide 95% probability of its completion in time. (20 Marks)

Module-4

- 7 Write short notes on:

- a) Project updating and information required for updating the project (05 Marks)
 b) Steps in the process of updating. (10 Marks)
 c) The updating cycle. (05 Marks)

OR

- 8 a. What is quality control management? (05 Marks)
 b. What are the factors affecting the quality of construction? (15 Marks)

Module-5

- 9 Wrote short notes on :

- a) Standard and special equipment
 b) Parameters considered in selection of equipments
 c) Economic life of an equipment
 d) The necessity to mechanise. (20 Marks)

OR

- 10 Describe and sketch any four equipments used in large scale construction. (20 Marks)
