

M.Tech-Structural Engineering & Construction Sem II  
**STC204 - Advanced Construction Management and Technology**

P. Pages : 1

Time : Three Hours



**GUG/W/16/3969**

Max. Marks : 70

- Notes :
1. All questions carry equal marks.
  2. Answer **any five** questions.
  3. Assume suitable data wherever necessary.
  4. Illustrate your answers wherever necessary with the help of neat sketches.
  5. Non programmable calculator is permitted.

1. a) What is critical path method? How it is helpful in project scheduling? Furnish its advantages. 5

b) A project has the following times schedule. 9

Activity	1-2	1-3	2-4	3-4	3-5	4-9	5-6	5-7	6-8	7-8	8-9	8-10	9-10
Time in weeks	4	1	1	1	6	5	4	8	1	2	1	8	7

Construct CPM Network and compute.

- i) TE and TL for each event.
- ii) Float for each activity.
- iii) Critical path and its duration.

2. a) Explain selection criteria of compacting equipments for various types of jobs in construction? 7

b) Explain advanced methods of concreting in different weather conditions with suitable sketches? 7

3. Explain method Statement For Installation of plumbing fixtures, Sanitary Wares and Accessories. 14

4. What in incremental launching of bridges? Explain balanced cantilever method of bridge construction with neat sketch. 14

5. a) What are the different types of Geogrids available for soil reinforcement? Explain Uniaxial geogrids with neat sketch. 7

b) What are the major functions of Ground improvement in soil? Discuss the current state of the practices of ground improvement with suitable example. 7

6. Write short notes on. 14

- i) Variance and earned value.
- ii) Concreting in different weather conditions.
- iii) Use of Haul truck.
- iv) Diaphragm wall.

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