

III B. Tech I Semester Regular Examinations, February-2022

CONSTRUCTION TECHNOLOGY & MANAGEMENT

(Civil Engineering)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions **ONE** Question from **Each unit**

All Questions Carry Equal Marks

UNIT-I

1. a) Explain in detail the role of construction project manager on construction project. [8M]
 b) Explain the work breakdown structure for residential building. [7M]

(OR)

2. a) What is Gantt bar chart and mile stone chart? Differentiate both. [8M]
 b) Discuss objectives of construction management and explain Planning, Scheduling and Controlling as a function of Construction Management. [7M]

UNIT-II

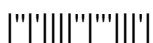
3. a) Explain the term "Updating". Why updating is necessary? [5M]
 b) What do you mean by PERT? Explain its significance. Plot a neat sketch for different time estimates. [10M]

(OR)

4. a) A project consists of 16 activities having their predecessor relationships as follows: [10M]
 (i) A is the first activity of the project
 (ii) B,C & D follow A and can be done concurrently
 (iii) E & G cannot begin until C is completed and can be performed simultaneously
 (iv) F is the immediate successor to activities B & E.
 (v) H & K run in parallel & both succeed G
 (vi) L succeeds F & H
 (vii) I & J are immediate successor activities to activity D.
 (viii) I & J are immediate successor to I & K. however both M & N can be performed concurrently
 (ix) Activities O & P are the last activities. Activity O is the immediate successor to N & L. Activity P is the immediate successor to M & J.

Draw the network and number the events.

- b) Write short notes on crashing of resources. [5M]



UNIT-III

5. a) Explain economic life of construction equipment in detail. [6M]
b) What are dozers? Discuss their classification and mention their uses and advantage over other earth moving equipment. [9M]

(OR)

6. a) Explain excavating equipment. Draw a neat sketch and explain working of any one of excavating equipment. [9M]
b) Write short notes on compaction rollers. [6M]

UNIT-IV

7. a) Explain the functions of following components with reference to Belt conveyer System: Belt, Feeders, Hold backs, Take ups. [8M]
b) Describe the various methods of dewatering system. [7M]

(OR)

8. a) Write short notes on different types of crushers. [6M]
b) What equipment is used for manufacturing of concrete? Discuss. [9M]

UNIT-V

9. a) Which are the causes of accident in construction project? Also explain why safety is important on construction project site. [8M]
b) What is fabrication? Explain about welding. [7M]

(OR)

10. a) What is a formwork? Explain their objectives, requirements and materials of form work. [8M]
b) What is erection? Explain how erection is carried out and the steps involved in successful erection of structures. [7M]

