

Roll No.

Total Pages : 3

002701

December 2023

B.Tech. (Civil) VIIIth Semester

Construction Engineering Management (PCC-CE-308)

Time : 3 Hours]

[Max. Marks : 75

Instructions :

1. It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.
2. Answer any four questions from Part-B in detail.
3. Different sub-parts of a question are to be attempted adjacent to each other.

PART-A

1. (a) What is the full form of CPM and PERT? (1.5)
(b) What is the Function of a Crane? (1.5)
(c) What do you understand by direct project cost? (1.5)
(d) Define pessimistic time and optimistic time estimate. (1.5)
(e) What is the full form of BIM? (1.5)
(f) What is the need of expansion joints in construction? (1.5)
(g) Define the types of Shallow foundation. (1.5)
(h) Define Deep foundation and their components. (1.5)

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- (i) Define various phases of Project Management. (1.5)
- (j) What is dummy activity? (1.5)

PART-B

- 2. (a) What are the different Techniques which are used in Project Management? Draw with neat sketches. (10)
- (b) What is the assumption underlying PERT analysis? How slack is computed? How probability of completion is calculated? (5)
- 3. (a) What is difference between CPM and PERT? (5)
- (b) Define contract. Also define their types with suitable example. (10)
- 4. A Network for a certain project is shown in figure and three-time estimate is marked on each activity, in the diagram - 1. find the critical path and compute, the project duration, standard deviation and normal and max. range of time to be allotted. (15)

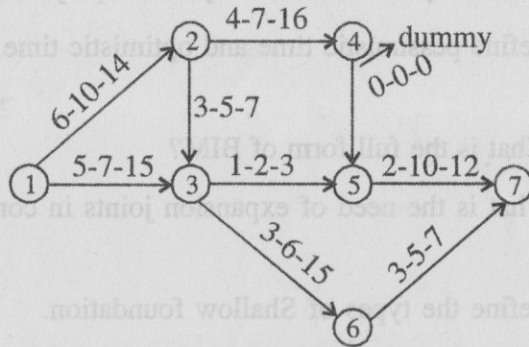


Diagram-1

- 5. (a) Define Earliest start time (EST), Earliest finish time (EFT), Latest finish time. (LFT), and Latest start time (LST). (15)
- (b) Define float, Total float, Free float Independent float (FID) (15)
- 6. (a) What is Network Diagram, and also define their types? With example. (15)
- (b) Define Activity, also define their types, neat diagrams. (15)
- 7. The network of a certain Project as shown in Fig. in A-O-A- diagram with activity duration as shown in figure. Compute Est, EFT, LST, LFT, FT FF, FID, FIN Critical Path & Project duration. (15)

