

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]

MAY-24-0548

CE-704 (Construction Engineering and Management)

B.Tech-7th (CBCS)

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note: Attempt five questions in all, selecting one question each from Section A, B, C and D. Section E is compulsory.

SECTION A

- (a) Differentiate between lump-sum and item rate contracts. (5)
(b) What is the difference between Earnest and security money? (5)
- (a) How quality in the construction industry is assured? (5)
(b) What are different methods of inspection? (5)

SECTION B

- (a) Discuss different types of disputes in the construction industry. (5)
(b) Why is it advisable to settle the dispute through arbitration instead of going to court-of-law? (5)
- Explain, with neat sketch, dredging on construction sites. (10)

SECTION C

- (a) What are various limitations of Bar-Charts used in the construction planning? (5)
(b) How Critical Path Method is different from Programme Evaluation and Review Technique? (5)

2

CE-704

- Draw the network for the following project and indicate the event times, critical path, activities early/latest start/finish times, total, free, and independent floats. (10)

Activity	Duration	Depends upon
1	3	6
2	4	1
3	2	2, 4
4	1	2
5	1	-
6	3	5
7	3	6
8	3	1, 6, 7
9	1	2, 3
10	1	2
11	1	2, 3, 9
12	7	1

SECTION D

- (a) How inventory control is done? (5)
(b) What are different safety measures in the design stage of a construction project? (5)
- What are the advantages of computerization in the development of centralized information system? (10)

SECTION E (Compulsory)

- i. List various factors that affect equipment selection.
ii. Draw the line diagram of Hoist.
iii. List down the documents included in the contract document.
iv. Differentiate between resource levelling and resource smoothening.
v. Draw financial schedule showing receipts and expenditures.
vi. Give the list of factors affecting job layout on construction sites.
vii. What are the requirements for inspection of reinforced cement concrete?
viii. What are different causes of accidents on construction sites? (8×2.5=20)