B.TECH.

Theory Examination (Semester-VIII) 2015-16

CONSTRUCTION TECHNOLOGY & MANAGEMENT

Time : 3 Hours   *Max. Marks : 100*

Section-A

1. Attempt all parts. All parts carry equal marks. Write answer of each part in short.   (2×10 = 20)

    (a) What is the hierarchy of formal organization?

    (b) What is the difference between Resource oriented & time oriented scheduling?

    (c) What are the apparaisal criteria to check the worthwhileness of the project?

    (d) What is the main difference of float in CPM & slack in PERT?

(e) What do you know by break event cost analysis?

(f) What is menat by the term "depreciation"?

(g) What is meant by the term "contract" as per Indian Contract Act?

(h) What do you know by arbitration?

(i) What are the factors depends on selection of material handling device?

(j) What are the three advantages of hiring an equipment?

Section-B

2. **Attempt any five questions from this section.**

$$(10×5 = 50)$$

(a) State the strength and weakness of centralized & decentralized organization.

(b) Explain the types of events & their inter-relationship.

(c) A father notes that when his teenage uses the telephone, she takes no less than 5 minutes for a call and sometimes as much as 1 hour. 15 minutes calls are most frequent than call of any other duration. If the daughter's call were an activity in a PERT project:

    (i) What would be the call's expected duration?

    (ii) What estimate would you give for its variance?

    (iii) In scheduling the project how much time would you allocate for the phone call?.

(d) What are the factors affecting cost of hauling?

(e) Explain roller conveyor & elevating conveyor in detail.

(f) What are the labour safety & welfare laws? Explain any two.

(g) Write down the elements of tender preparation with one case study.

(h) Briefly explain about the investment.

Section-C

Attempt any two questions from this section. (15×2 = 30)

3. (a) Explain the different types of organization.

   (b) Explain the phases of project life cycle.

4. Determine the critical path & find the total, free, independent & interfering float for all the activities.

Activity	1-2	1-3	1-4	2-7	3-4	4-5	4-7	5-6	5-7	5-8	6-8	7-8
Duration (days)	8	10	5	6	3	7	0	4	3	6	5	5

5. Explain bull dozers, its types & applications in construction.