

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 100801

Roll No.

**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 appraisal 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 meant 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**

UPTU NOTES

**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.