

**B.E. DEGREE EXAMINATIONS: NOV/DEC 2012**

Seventh Semester

**CIVIL ENGINEERING**

CEE124: Construction Project Management

**Time: Three Hours**

**Maximum Marks: 100**

**Answer All Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. A study which determines the movement of men, materials and machineries for maximum production is called  
A) work study      B) time study      C) motion study      D) progress study
2. The difference between time available and time required to do job is known as  
A) event      B) float      C) duration      D) constraint
3. Which of the following statement is true regarding various activity scheduling tools?  
A) PDM allows for conditional branching and iteration of activities  
B) PDM uses activity-on-node (AON) diagramming method  
C) PDM allows for conditional branching and iteration of activities  
D) PDM uses analogous methods as an estimation technique
4. Which of the following is not method of the Activity Duration Estimation process?  
A) One time Estimate      B) Three time Estimate  
C) Trapezoidal distribution estimate      D) Attribute Estimate
5. The time which results in the least construction cost of an activity is known as  
A) normal time      B) slow time      C) crash time      D) standard time
6. In transportation problem, optimality test can be performed by feasible solution in which number of allocations is  
A)  $m + n - 1$       B)  $m + n + 1$       C)  $m + n$       D)  $m - n$   
where, m is number of rows and n is number of columns
7. Proposed new technologies, process modifications, equipment replacements are the elements of  
A) Financing      B) Contracting      C) Technical design      D) Implementation
8. Cycle time is equal to sum of  
A) Total travel time + total turn time + load time  
B) Total travel time + Haul travel time + Load time  
C) Total return time + Haul travel time + Load time  
D) Total turn time + total return time + Load time



Discuss the details about various construction costs involved in water tank construction projects. (10)

(ii) Explain the importance of resource constraints for optimizing network schedules. (4)

23. a) Construct network and determine the optimum duration and optimum cost for a project with the relevant data is given below. Indirect cost is Rs. 3000 per week.

Activity	Normal		Crash		Cost Slope Rs. per week
	Time (weeks)	Cost (Rs.)	Time (weeks)	Cost(Rs.)	
1-2	3	12000	2	16000	4000
1-3	6	18000	3	24000	2000
2-4	2	20000	1	23000	3000
3-4	4	16000	2	21000	2500
4-5	5	30000	4	35000	5000

(OR)

b) Explain the assignment problem to optimize resource with suitable examples.

24. a) Classify and discuss construction equipments according to working functions.

(OR)

b) Explain the procedure to calculate earthwork quantity using mass diagram for Railway projects.

25. a) Describe the rules to be followed for inviting, scrutinising and opening of tenders. How the tenders are accepted?

(OR)

b) Explain the general instructions to handle and record entries in measurement books for annual repair of Hospital buildings.

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