B.Tech. Civil (Construction Management) /
B.Tech. Civil (Water Resources Engineering)
Term-End Examination
December, 2017

00517

ET-524(B) : CONSTRUCTION MANAGEMENT – I

Time : 3 hours   *Maximum Marks : 70*

Note : *Question no. 1 is **compulsory**. Out of the remaining questions, attempt any **four**. All questions carry equal marks.*

1. The activity dependence table and duration (in weeks) of a project are given below :

S. No.	Activity	Preceding Activities	Duration (Weeks)
1	A	–	1
2	B	A	14
3	C	B, F	6
4	D	A	4
5	E	B, F	6
6	F	A	18
7	G	D, E, C	2
8	H	B	3
9	J	H	3
10	K	H	4
11	L	J, K	1
12	M	L	1
13	N	G, M	2

Draw the network diagram and mark the critical path. *14*

2. Give the symbols of the following :   *7×2=14*

    (a)   Glass

    (b)   Double swing door leaf

    (c)   Pump

    (d)   Urinal

    (e)   Exhaust fan

    (f)   Fire extinguisher

    (g)   5 amps 3-pin socket

3. (a)   Explain the major components of construction cost.   7

    (b)   What do you mean by Depreciation ? Explain the straight line method of depreciation.   7

4. (a)   Discuss various types of Tenders and their suitability for different types of construction projects.   7

    (b)   Prepare a checklist for scrutinizing tender documents prior to issue.   7

5. Differentiate between any *two* of the following :   *2×7=14*

    (a)   Arbitration vs Litigation

    (b)   Earnest Money vs Security Deposit

    (c)   Bid Bond vs Performance Bond

6. Explain the functions and operating constraints of the following earthmoving equipments : $4 \times 3\frac{1}{2} = 14$

(a) Scraper

(b) Sheep Foot Roller

(c) Motor Grader

(d) Dozer

7. Write short notes on the following : $4 \times 3\frac{1}{2} = 14$

(a) Advantages of CAD System over Manual System

(b) Work Breakdown Structure

(c) Discount Cash Flow Methods

(d) Guidelines for Smooth Contract Administration

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