B.Tech. Civil (Construction Management) /
B.Tech. Civil (Water Resources Engineering)
Term-End Examination
December, 2015

ET-524(B) : CONSTRUCTION MANAGEMENT – I

Time : 3 hours   *Maximum Marks : 70*

Note : *Attempt any **five** questions. All questions carry equal marks. Use of scientific calculator is permitted.*

1. (a)   What are the essential features of a construction contract ?

    (b)   What are tender documents ? Discuss briefly the contents of typical tender documents.

    6+8=14

2.   Determine the cost of bricks at site. Data given is as follows :

    (a)   Cost of bricks at source = ₹ 5,000 per 1000 bricks

    (b)   Hire charges per truck = ₹ 3,000 per day for 8 hours

(c) The capacity of the truck = 5000 bricks

(d) Permissible speed limit = 40 km/hr outside the town and 30 km/hr inside

(e) Loading and unloading time = 45 minutes each

(f) Loading and unloading charge = ₹ 500 per operation

(g) Distance = 50 km (out of which 30 km outside the town and 20 km inside)

Assume that the truck makes two trips every time to bring one truckload of material to the site (One empty trip to the source and one loaded up to the site). *14*

3. (a) Explain the various modes of resolving disputes.

   (b) What are the advantages of Arbitration over Litigation ? *7+7=14*

4. Discuss the following aspects of site organisation. $4 \times 3\frac{1}{2} = 14$

   (a) Site Drainage

   (b) Storage of material

   (c) Protection and Security of site

   (d) Accommodation facilities for labour

5. What is the mechanism of making economic comparison ? Explain 'Return on Investment' when compared to BOOT Projects with imaginary figures. *5+6+3=14*

6. Explain the Line of Balance technique for scheduling repetitive work with examples and neat diagram. *14*

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

  (a) Cost Time Trade-off

  (b) Structural Drawings

  (c) Fundamentals of Illumination

  (d) Training of Workers

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