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DAI1365

## Construction Management - II (New) (1290)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Solve **any two** questions from each unit.
5. Assume additional suitable data, if necessary.
6. Figures to the right indicate full marks.
7. Use of non programmable calculator is allowed.
8. Answers to all the questions should be written in the same answer book.

### UNIT - I

1. a) Find Injury frequency Rate, Injury severity Rate, Injury Index from the following data. 10
  - i) Construction period = 40 weeks (1 week = 50 hours of working).
  - ii) Number of disabling injuries = 32.
  - iii) Number of days lost due to accident = 50.
  - iv) Average number of persons worked per day = 250.
- b) Explain in detail, factories Act. 10
- c) Explain in detail causes and classification of construction accidents. 10

### UNIT - II

2. a) Cement is used in a precast plant at the rate of 30 tonns per month. The cost of cement is Rs. 4600 per tonne. The ordering cost is Rs 400 per order and the holding cost including wastage and pilferage is about 4.5% of the average inventory cost. Estimate the Economic Order Quantity of cement. 10
- b) Explain in detail with neat sketch A - B - C analysis. 10
- c) Explain in detail functions and objectives of material management. 10

**UNIT - III**

3. a) Explain in detail essentials of contract. 10
- b) What are the different types of contracts ? Explain any two types in detail. 10
- c) What are tender documents ? Explain in detail. 10

**UNIT - IV**

4. a) Explain with neat sketch operation and uses of power shovel. 10
- b) What are the uses of dragline ? Explain its functions with neat sketch. 10
- c) i) Compare crawler mounted tractors and wheel mounted tractors. 5
- ii) Write a short note on clam - shells. 5

**UNIT - V**

5. a) Write short notes on following. 10
- i) Tower crane.
- ii) Derrick crane.
- b) What are the different types of rollers ? Explain vibratory roller in detail. 10
- c) i) Explain about safety in crane operations used for construction. 5
- ii) How the cranes are useful in steel construction ? Explain in detail. 5

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