Roll No ....

UITians

CE-802

B.E. VIII Semester

Examination, June 2017

Construction Planning & Management

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any Five questions.
ii) All questions carry equal marks.
iii) Assume suitable data, if required.

1. a) Describe the factors affecting the job layout and draw a neat sketch of job layout for construction of multistoreyed building. 7

   b) Differentiate between PERT and CPM. 7

2. a) Explain the formwork. What is the requirement of good formwork. Mention stripping times for formwork. 7

   b) Discuss various factors affecting the selection of construction equipment. 7

3. From the following data determine the probable cost of owning and operating a 5 cum diesel engine crawler mounted power shovel: 14

   Factory price of power shovel = Rs. 8,00,000
   Freight charges = Rs. 60/tonne
   Shipping weight = 120 tonne
   Unloading and assembly charges = Rs. 4,200
   Engine Power = 190 H.P
   Crank case capacity = 45 litre
   Time between the oil changes = 100 hours
   Useful life = 5 years
   Operating hours per year = 4000 hrs.

Salvage value = Rs. 85,000

Operating factor = 0.6

Maintenance and Repair cost = 100% depreciation

Cost of diesel = Rs. 50/litre

Cost of lubricating oil = Rs. 200/litre

adopt straight line method of depreciation and take investment cost as 15% of average investment cost.

4. a) Compare the characteristics and applications of different types of earth excavating equipment.   7

  b) Draft a notice inviting tenders for the construction of a canteen building.   7

5. a) State and explain various types of contracts for execution of Civil Engineering works. Give merits and demerits for each of them.   10

  b) Explain the methodology for settlement of contractual disputes through arbitration.   4

6. a) Explain in detail the different types of specification.   7

  b) Explain the various forms used in construction work.   7

7. a) Explain the three types of organisation and explain the suitability of each type for different construction.   10

  b) Describe the five important provisions of the labour welfare Act 1965.   4

8. Write short notes on any four of the following :   4×3½=14

  a) Problem of equipment management.

  b) Transportation model.

  c) Measurement book.

  d) Compaction and grouting.

  e) Schedule of construction.

  f) Free float and total float.

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