Total number of printed pages – 4 **B. Arch**

PCAR 8404

Eighth Semester Examination – 2008

CONSTRUCTION AND PROJECT MANAGEMENT

Full Marks – 70

Time : 3 Hours

Answer Question No. ***1*** *which is compulsory and any* ***five*** *from the rest.*

The figures in the right-hand margin indicate marks.

1. Answer the following questions : 2 ×10

   (a) What is a turn-key contract ?

   (b) What is the importance of time-cost analysis ?

   (c) What do you understand by heavy construction ? Give few examples.

   (d) What are the duties and responsibilities of a contractor ?

   (e) Classify the Civil Engineering drawings.

   (f) What is briefing stage in a construction project ?

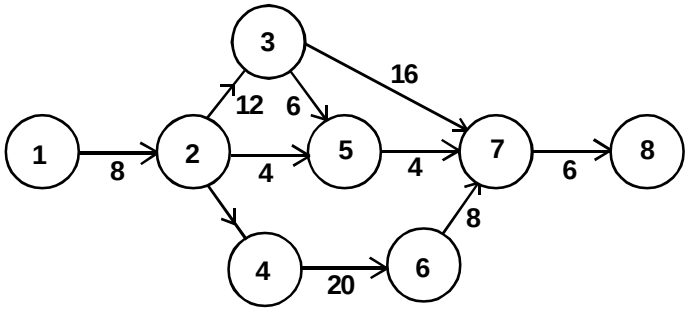
   (g) What is the importance of Bar Charts ?

   (h) What is PERT ?

   (i) What are the advantages of scheduling ?

   (j) What is a critical path ?

Identify the critical path in the network shown in the figure below and determine the project completion time. 10



(Duration in weeks)

3. What is the significance of construction management ? What are the objectives and functions of construction managemnet ? 10

4. Describe the procedure for determining optimum cost and optimum completion time for a project using CPM. 10

5. Describe the following stages in planning in detail : 10

   (a) Pre-Tender Statge

   (b) Contract Stage.

6. Explain the purpose and activities of different stages in construction. Differentiate between (a) Construction stage and commissioning stage (b) Contract and Tender. 10

7. Explain the merits and demerits of the following types of contracts : 10

   (a) Lumpsum Contract

   (b) Schedule Contract

   (c) Cost plus percentage of cost contract

   (d) Negotiated Contract

   (e) Turn key Contract.

8. (a) What is (a) Pessimistic Time Extimate (t_p), (b) Optimistic Time Estimate (t_o), (c) Most likely Time Estimate (t_e).

   State the relation of the above time estimates with the expected time of the activity (t_e). 5

   (b) Define the following terms : 5

   (i) Activity

   (ii) Event

   (iii) Network.

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