Code: CE8T1

IV B.Tech - II Semester – Regular Examinations – April 2016

CONSTRUCTION TECHNOLOGY AND PROJECT MANAGEMENT
(CIVIL ENGINEERING)

Duration: 3 hours   Max. Marks: 70

Answer any FIVE questions.   All questions carry equal marks

1. a) What are the objectives of planning?   7 M

   b) What are the steps involved in planning?   7 M

2. a) Explain briefly Choice of Construction Technology and
      Construction method.   7 M

   b) Write short note on the following: 7 M
      i) Scaffolding   ii) Erection of steel structures

3. a) Differentiate between the frequency distribution and
      probability distribution in detail.   7 M

   b) Describe about latest allowable occurrence time.   7 M

4.   A construction project consists of twelve activities. The
      estimated duration (in days) required to complete each of
      the activities along with the corresponding network diagram
      is shown below.

	Activity	Duration (days)		Activity	Duration (days)
A	Inauguration	1	G	Flooring	25
B	Foundation work	7	H	Electrification	7
C	Structural construction-1	30	I	Plumbing	7
D	Structural construction-2	30	J	Wood work	7
E	Brick masonry work	25	K	Coloring	3
F	Plastering	7	L	Handing over function	1
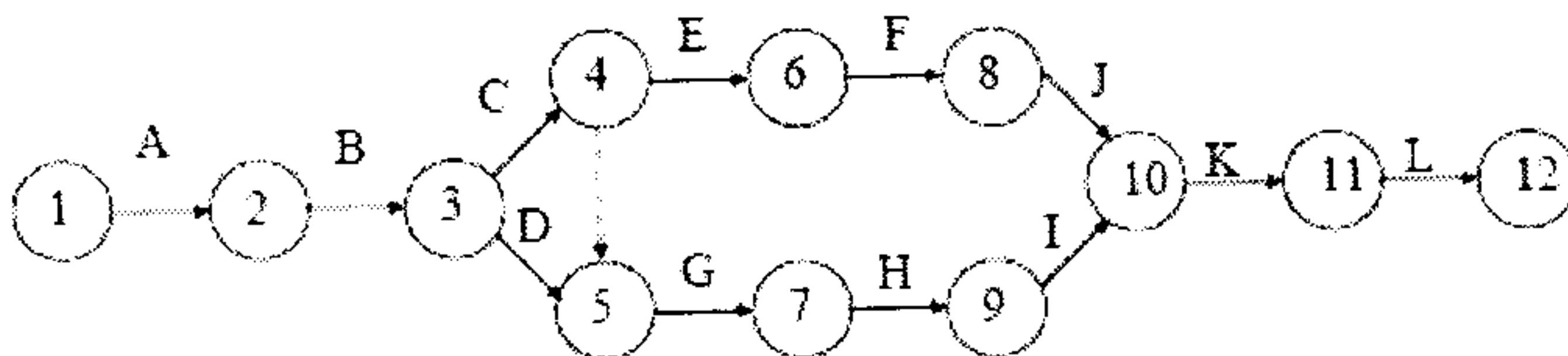
Calculate the Total floats (in days) for the activities 5-7 and 11-12 for the project.   14 M

5. a) Differentiate resource smoothing and resource leveling.
7 M

b) What is ABC analysis in inventory management? Explain in detail.
7 M

6. a) How to conduct time and motion study, Explain in detail with an example.
7 M

b) With suitable application differentiate between Backhoe and Power shovel.
7 M

7. Discuss the four basic concepts of Total Quality Management with examples.　　14 M

8. a) Discuss the usage and advantages of knowledge based expert system in construction projects.　　7 M

   b) Explain how MIS is useful in improving the efficiency of construction projects.　　7 M