

5241.A

Name:

Reg.No.

EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, JUNE 2010

CE.04.802 – Construction Engineering and Management

Time: 3 hours

Maximum: 100 marks

(8 x 5 = 40)

- 1 (a) Distinguish between Event and Activity
(b) Enumerate the uncertainties involved in construction scheduling.
(c) Explain with a neat sketch, the working of a power shovel.
(d) What is ready mix concrete? How it is useful?
(e) Why is fender floated? What are the types of fenders?
(f) What are the functions of ISO?
(g) Describe briefly about inventory control.
(h) What is the concept of ethics?
- 2 (a) A small project consists of seven activities for which the relevant data are given below:

(15)

Activity	Preceding Activity	Activity Duration (days)
A	-	4
B	-	7
C	-	6
D	A, B	5
E	A, B	7
F	C, D, E	6
G	C, D, E	5

- i) Draw the project network
ii) Find the critical path
iii) Present in a tabular form, earliest time, latest time and float for each activity

(OR)

- (b) A project consists of seven activities whose time events whose time estimates are listed in the table as follows: (15)

Activity		Estimated duration (weeks)		
i	j	Optimistic	Most likely	Pessimistic
1	2	1	1	7
1	3	1	4	7
1	4	2	2	8
2	5	1	1	1
3	5	2	5	14
4	6	2	5	8
5	6	3	6	15

- i) Draw the project network
- ii) Find the expected duration and variance of each activity. What is the expected project length?
- iii) Calculate the variance and standard deviation of project length. What is the probability that project will be completed a) at least 4 weeks earlier than expected b) no more than 4 weeks later than expected?

- 3 (a) With suitable sketches, describe the working of various pile driving equipments. (15)

(OR)

- (b) i) Explain the operation of any one of the excavation equipments (8)
- ii) What are the factors to be considered for selection of pile type? (7)

- 4 (a) i) Write a note on quality control. (7)
- ii) Write note on organization and functioning of standardization at National and International level. (8)

(OR)

- (b) What are the different methods of construction? Explain. (15)

- 5 (a) i) Describe with a flow diagram, the steps required for material management of a construction firm. (8)
- ii) Write a note on EOQ. (7)

(OR)

- (b) Discuss the role and importance of profession bodies. (15)

