

TED (10)–3030

Reg. No.

(REVISION—2010)

Signature

FIFTH SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY
MARCH, 2013

CONSTRUCTION MANAGEMENT AND SAFETY ENGINEERING

[Time : 3 hours

(Maximum marks : 100)

PART—A

Marks

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. Define construction management.
2. What is meant by budget ?
3. Give any two situations at which pre-measurements are taken.
4. What is an Indent ?
5. Define Entrepreneur.

(5×2=10)

PART—B

II Answer *any five* of the following. Each question carries 6 marks.

1. Give any six factors involves in construction management.
2. Compare CPM and PERT.
3. What are the advantages of piece work system of contract ? (any four).
4. What is the need for earnest money deposit and security deposit ?
5. Describe the method of maintaining materials at site account.
6. List any six heavy plant and machinery generally used in large project.
7. What are the requirements to become a licensed surveyor and contractor ?

(5×6=30)

PART—C

(Answer *one* full question from each unit. Each question carries 15 marks.)

UNIT—I

III (a) Give any seven points to be included in a project report. 7

(b) Consider a project comprising the activities A, B, C, D, E, F, G, H, J and K. The activities have the following relationships.

Activity A (8) and B (9) are initial activities and may be carried out concurrently. (8 and 9 are duration in days for the activity A and B respectively)

Activity C (12) and E (7) follow A

Activity G (12) and F (10) follow B

Activity G (12) follow C and D

Activity H (5) can be started only after completing activities C, D and F

Activity E precedes J (11)

K (4) is the terminal activity and it follows activities J, G and H.

The following table indicates the relationships and also activity duration.

Activity	Preceding	Succeeding	Duration
A	None	C, E	8
B	None	D, F	9
C	A	G, H	12
D	B	G, H	15
E	A	J	7
F	B	H	10
G	C, D	K	12
H	C, D, F	K	5
J	E	K	11
K	J, G, H	None	4

Construct a CPM network diagram and identify the critical path and calculate the completion time of the project. 8

OR

IV (a) Discuss the need for planning. (any seven points). 7

(b) Explain the use of work study in construction management. 8

UNIT—II

V (a) What are the informations should be furnished in a tender notice ? (any seven). 7

(b) What are the essential features of :

(i) Lumpsum tender system.

(ii) Cost plus percentage tender system. 8

OR

		Marks
VI	(a) What are the details must contain in a contract agreement ? (any seven).	7
	(b) What are the general instructions to be observed in recording measurements in the measurement books ?	8
UNIT—III		
VII	(a) State the aims and objectives of forming trade union in India.	7
	(b) List the advantages of central stores. (any eight).	8
OR		
VIII	(a) What are the external sources of recruitment ? (any seven).	7
	(b) What are the objectives of Human Resources management ? (any eight).	8
UNIT—IV		
IX	(a) What are the general principles of safety in construction ? (any seven).	7
	(b) Compare the entrepreneurial style and managerial style. (any eight).	8
OR		
X	(a) What are the special precautions to be taken in storage and handling of dangerous materials ? (any seven).	7
	(b) List the demerits of ISO : 9000 series of standards. (any eight).	8

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