

SE PL Common

TED (10) – 2004

(REVISION — 2010)

Reg. No.

Signature

FIFTH SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/
TECHNOLOGY — MARCH, 2015

INDUSTRIAL MANAGEMENT AND SAFETY

(Common to all branches except DCP, CE, QS & CM, AR and CB)

[Time : 3 hours

(Maximum marks : 100)

PART—A

(Maximum marks : 10)

Marks

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

1. What is job evaluation ?
2. Define inventory.
3. What is dummy activity ?
4. Define accident.
5. Write any two causes of air pollution. (5×2=10)

PART—B

(Maximum marks : 30)

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

1. List the functions of management.
2. Explain different method of training.
3. State various benefits of ISO.
4. List the methods of purchasing.
5. What are the scope of CPM and PERT ?
6. List the environmental factors causing accident.
7. List the necessity of solid waste management. (5×6=30)

PART—C

(Maximum marks : 60)

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

UNIT—I

- III (a) Explain the contributions of FW Taylor to Scientific management. 8
 (b) How to start a co-operative society ? 7

OR

- IV (a) What are the advantages and disadvantages of functional organization ? 8
 (b) Explain differential piece rate system. 7

UNIT—II

- V (a) Write any ten functions of sales department. 10
 (b) What is bin card ? Explain. 5

OR

- VI (a) List the steps of purchase procedure. 8
 (b) List the steps for ISO 9000 installation. 7

UNIT—III

- VII (a) Write short note on :
 (i) Activity (ii) Earliest finish (iii) Latest finish. 6
 (b) A project has 7 activities. Draw the network diagram. 3 times estimates are given below :
 (i) Draw the project network (iii) Find the project duration.
 (ii) Identify the critical path

Activity	Optimistic time (weeks)	Most likely time (weeks)	Pessimistic time (weeks)
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

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OR

VIII (a) State the applications of CPM and PERT.

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- (b) A healthy person wanted to decide his daily requirements of proteins, fats and carbohydrates at the minimum cost. The choice is to be made from 4 different types of foods. The yields per unit of these foods are given below :

Yield per unit				
Food type	Proteins	Fats	Carbohydrates	Cost per unit (₹)
A	4	3	7	45
B	5	3	3	40
C	9	8	8	80
D	7	6	5	60
Minimum requirement	800	200	700	

Formulate the LPP for the above model.

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UNIT—IV

IX (a) State the following :

- (i) Performance index (ii) Incident rate.

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- (b) List environment factors of accident.

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OR

X (a) State the mechanical factors of accident.

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- (b) Explain the precautions while working in hazardous environment.

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