

PRACTICE SET

End Semester Examination, Spring- 2026

Program: B.TECH

Semester: VIII

Subject: INDUSTRIAL MANAGEMENT

Subject Code: 8OEEL402

Course Outcomes	Description
CO1	Apply management practices & & practice the various management theory.
CO2	Describe the effectively the formation of companies, financial analysis and costing, & operation Research.
CO3	Identify strategies for deployment and management of human resources on organization.
CO4	Understand Project management & assurance Sciences.

UNIT I

Section II (10 marks)

1. Define management and lists the objectives. CO1 (Remember)
2. Explain the function of management. CO1 (Understand)
3. Define organization and list the type of organization structure. CO1 (Remember)
4. Explain the importance of management for engineers. CO1 (Understand)

UNIT II

Section II (10 marks)

5. Explain different types of company. CO2 (Understand)
6. What is costing and its elements? CO2 (Remember)
7. If a company has fixed cost of \$ 15000 per month and sale a product for \$ 50 and the variable cost is \$20. Find the BEP. CO2 (Apply)
8. What are objectives and features of PERT? CO2 (Remember)
9. Differentiate between PERT and CPM. CO2 (Understand)
10. Define sequencing and scheduling and list the objectives of sequencing and scheduling. CO2 (Remember)
11. What are the advantages of sequencing and scheduling? CO2 (Remember)
12. What is float? Explain the different types of float. CO2 (Understand)
13. Find the sequence, completion time and idle time of each machine. CO2 (Apply)

Jobs	A	B	C	D	E	F	G	H
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M1	2 min	8 min	4 min	5 min	6 min	9 min	2 min	12 min
M2	4 min	5 min	3 min	3 min	7 min	11 min	9 min	6 min

14. Find the sequence, completion time and idle time of each machine. CO2 (Apply)

Jobs	A	B	C	D	E	F
M1	2 min	3 min	5 min	11 min	1 min	7 min
M2	4 min	7 min	9 min	13 min	9 min	14 min
M3	6 min	4 min	2 min	10 min	8 min	2 min

Section III (20 marks)

15. Find the estimate average time and variance of each activity and draw activity flow diagram. CO2 (Evaluate)

Activity	Predecessor Activity	Optimistic time estimate (to days)	Most likely time estimate (tm days)	Pessimistic time estimate (tp days)
A	-	2	4	6
B	A	3	6	9
C	A	8	10	12
D	B	9	12	15
E	C	8	9	10
F	D,E	16	21	26
G	D,E	19	22	25
H	F	2	5	8
I	G	1	3	5

16. Draw the network diagram and determine the critical path and time duration for the following project: CO2 (Apply)

Activity	Time estimate (Weeks)
1-2	5

1-3	6
1-4	3
2-5	5
3-6	7
3-7	10
4-7	4
5-8	2
6-8	5
7-9	6
8-9	4

17. Draw the project network diagram. Determine the critical path and the project completion time. CO2 (Evaluate)

Activity	IMMEDIATE Predecessor Activity	time estimate (weeks)
A	-	4
B	-	7
C	-	3
D	A	6
E	B	4
F	B	7
G	C	6
H	E	10
I	D	3
J	F,G	4
K	H,I	2

UNIT III

Section II (10 marks)

- 18. What is HRM? List the steps in HR deployment. CO3 (Understand)
- 19. Explain Product Engineering and its objectives. CO3 (Remember)
- 20. Illustrate the factors affecting Plant location. CO3 (Remember)
- 21. What is objective and types of plant layout? CO3 (Understand)
- 22. Describe function of Production planning. CO3 (Remember)
- 23. Explain inventory control and its types? CO3 (Remember)

Section III (20 marks)

- 24. Find the EOQ. The annual demand is 10000 units. The order cost is Rs 50 per order, the holding cost is Rs 2 per unit per year. CO3(Evaluate)
- 25. The EOQ is 316 unit, the cost per order is Rs50. The cost per unit is Rs8 and inventory carrying rate is 25%. Find the annual demand. CO3 (Evaluate)

UNIT IV

Section II (10 marks)

- 26. Define project and illustrate its characteristic. CO4 (Remember)
- 27. What is advantage of project management? CO4 (Remember)
- 28. Explain reliability, quality and maintainability. CO4 (understand)

**Summary Sheet:
CO Wise**

CO	Q. No	Marks
CO1	1,2,3,4	40
CO2	5,6,7,8,9,10,11,12,13,14,15,16,17	180
CO3	18,19,20,21,22,23,24,25	100
CO4	26,27,28	30
Total		350

Unit Wise

Unit	Q. No	Marks
Unit 1	1,2,3,4	40
Unit 2	5,6,7,8,9,10,11,12,13,14,15,16,17	180
Unit 3	18,19,20,21,22,23,24,25	100
Unit 4	26,27,28	30
Total		350

Blooms Taxonomy Level (BTL) Wise

BTL	Q. No	Marks
LOT	1,2,3,4,5,6,7,8,9,10,11,12,18,19,20,21,22,23,26,27,28	210
HOT	13,14,15,16,17,24,25	140
Total		350

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Disclaimer: - This is a practice set. The Question in End term examination will differ from the practice set. This practice set is meant for practice only.