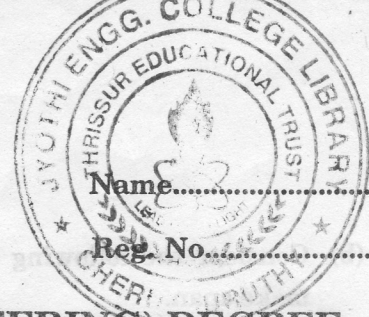


C 15862

(Pages : 2)



**EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, MAY 2011**

ME 04 802 – OPERATION MANAGEMENT

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

1. (a) Explain the differences between single-stage and multi-stage decision-making.
(b) Discuss the role of statistical techniques in PERT.
(c) What do you mean by sensitivity analysis?
(d) What are the advantages and disadvantages of a 'P' system?
(e) Discuss the characteristics of production planning.
(f) Why the production schedule related to anticipated demand?
(g) What are matrix layout and fixed position layout? Explain where they are used.
(h) Explain the nature of an optimal solution in a line balancing problem.

(8 × 5 = 40 marks)

2. (a) What are the decision trees and explain with suitable example, formulation of discounted decision trees?

Or

- (b) Discuss the procedure of CPM analysis with the help of a simple example.

3. (a) Explain sensitivity analysis. Under what circumstances is it needed and under what conditions do you think it is not necessary?

Or

- (b) Explain the concept of the Q-system, P-system for management of inventories by giving appropriate example.

4. (a) (i) Briefly describe the procedure of making a sales forecast.
(ii) What are the criteria of a good sales forecasting method?
(iii) Write a brief note on trend line forecast.

Or

Turn over

- (b) Consider the following 3 machines and 5 jobs. Find optimal schedule and corresponding make span.

Job	Machine 1	Machine 2	Machine 3
1	11	10	12
2	13	8	20
3	15	6	15
4	12	7	19
5	20	9	7

5. (a) Explain the primary behavioural factors involved in process-oriented layout design. Give examples.

Or

- (b) (i) Explain the relationship exist between the layout and location decision.
 (ii) Discuss the advantages of rural and urban locations for a plant.

(4 × 15 = 60 marks)