

**SEVENTH SEMESTER B.TECH DEGREE EXAMINATION
MODEL QUESTION PAPER
13.701 PRINCIPLES OF MANAGEMENT AND DECISION MODELING.(MPU)**

Time: 3 Hours

Marks: 100

Part A

(Answer ALL questions; each carries 2 marks)

1. What are the characteristics and elements of organization?
2. Difference between organizational development and management development?
3. What are the contributions of Gantt for scientific management?
4. List out the major principles of management?
5. What are the major principles of a good personnel policy?
6. What are the basic functions of trade unions in industry?
7. What is the concept of price mix?
8. Explain product life cycle?
9. Distinguish between CPM and PERT?
10. Explain the principle and mathematical model of a simple transportation problem?

(10 X 2 = 20 Marks)

Part B

(Answer any ONE from each module; Questions carries 20 marks)

MODULE -I

11. Explain the functions of management? How it affects the functioning of an industry?
- OR**
12. Explain the various types of companies?

MODULE -II

13. Explain different factors to be considered for the selection of site for an industry?
- OR**
14. Explain the various steps taken for labour welfare?

MODULE -III

15. What is sales forecasting? Explain various methods of sales forecasting?
- OR**
16. A farmer has 1000 acres of land on which he can grow corn, wheat and soybeans.
Each acres of corn costs Rs.100 for preparation and requires 7 man days of work and

yield a profit of Rs.30. Each acres of wheat costs Rs.120 for preparation and requires 10 man days of work and yield a profit of Rs.40. Each acres of soybean costs Rs.70 for preparation and requires 8 man days of work and yield a profit of Rs.20.If the farmer has Rs.100000 for preparation and Rs.8000 for man-day works. How many acres should he allocate to each crop to maximize profit?

MODULE -IV

17. Using the information in Table, assuming that the project team will work a standard working week (5 working days in 1 week) and that all tasks will start as soon as possible. Determine the critical path of the project and calculate the planned duration of the project in weeks?

Task	Description	Duration (Working Days)	Predecessor/s
A	Requirement Analysis	5	
B	Systems Design	15	A
C	Programming	25	B
D	telecoms	15	B
E	Hardware Installation	30	B
F	Integration	10	C, D
G	System Testing	10	E, F
H	Training/Support	5	G
I	Handover and Go-Live	5	H

OR

18. What are the various simulation techniques used in optimization. Explain the procedure of genetic algorithm and illustrate it with an example?

(4 x 20=80 Mark)