

2021

M.Com. (M.E.F.B.) Third Semester

FB-305: Computers in Family Business Management

Time allowed: 3 Hours

Max. Marks: 80

NOTE: Attempt five questions in all, selecting atleast two questions from each Unit.

x-x-x

UNIT – I

- I. Describe why organizations need to integrate Information Technology. Explain the need to understand the organizational structure while building information system solutions. (16)
- II. How is the trend toward open systems, connectivity, and interoperability related to business use of the Internet, intranets, and extranets? (16)
- III. How can information technology support a company's business processes and decision making and give it a competitive advantage? Give an example to illustrate your answer. (16)
- IV. What is a "Digital Firm"? Explain the need to understand the organizational structure while building information systems solutions. (16)
- V. Explain the importance of management by exception. Can it be the only approach in managing the business? (16)

UNIT – II

- VI. A Company makes two kinds of leather belts N belt A and belt B. Belt A is a high quality belt and belt B is of lower quality. The respective profits are Rs 4 and Rs 3 per belt. The production of each of type A requires twice as much time as a belt of type B, and if all belts were of type B, the company could make 1000 belts per day. The supply of leather is sufficient for only 800 belts per day (both A and B combined). Belt A requires a fancy buckle and only 400 of these are available per day. There are only 700 buckles a day available for belt B.
What should be the daily production of each type of belt? Formulate this problem as an LP model and solve it using the simplex method. (16)
- VII. The N. Dustrious Company produces two products: I and II. The raw material requirements, space needed for storage, production rates, and selling prices for these products are given in Table 1.

P.T.O.

(2)

Table 1. Production Data for N. Dustrious Company

	Product	
	I	II
Storage space (ft ² /unit)	4	5
Raw material (lb/unit)	5	3
Production rate (units/hr)	60	30
Selling price (\$/unit)	13	11

The total amount of raw material available per day for both products is 1575 lb. The total storage space for all products is 1500 ft², and a maximum of 7 hours per day can be used for production. All products manufactured are shipped out of the storage area at the end of the day. Therefore, the two products must share the total raw material, storage space, and production time. The company wants to determine how many units of each product to produce per day to maximize its total income. Formulate the linear programming problem and solve it graphically. (16)

VIII. Write short notes on:-

- a) Travelling Salesman Problem
- b) Assignment Models

(2x8)

IX. Write short notes on:-

- a) Balanced and unbalanced Transportation problems
- b) Recurrence Relation
- c) Linear Programming Problems
- d) PERT

(4x4)

X. What is the importance of feasibility assessment in SDLC? Can a system be developed without feasibility assessment? (16)

x-x-x