Ref. No.: Ex/IT/HS/B/T/422/2023

### **B.E. INFORMATION TECHNOLOGY FOURTH YEAR SECOND SEMESTER - 2023**

Subject: MANAGEMENT Time: 3 Hrs Full Marks: 100

Instructions:

This Question Paper Consists of 6 Sections. (A –F)

You are required to Answer ANY 5 Sections out of 6

#### Section A

**Qs 1**. For the last three years, Mahagun Industries is not functioning smoothly and systemically. The relations between management and employees are becoming bitter day by day. After a complete analysis, it was observed that employees are not working effectively and efficiently and management is not fulfilling its commitment of increments and promotions,

- a. Which management principle is being ignored in given case?
- b. Can the problem be solved if only management becomes in fulfilling its promises?
- **c.** What should be the appropriate course of action to achieve smooth and systematic functioning of Mahagun industries?

[ 4 Marks ]

- **Qs 2.** Pankaj, a purchase manager of a company, has to purchase 85 tons of raw materials. He purchased the raw material from a firm owned by his relative, at a rate more than market price.
  - a. Which management principle is being violated?
  - b. What should have been the appropriate course of action by Pankaj?

[ 2 Marks ]

- **Qs 3**. Pratap works as a head mechanic in M/s Royal Industries (machine assembling industry). He requires a number of tools while assembling the machine. For getting the tools, Pratap has to move frequently to the tool room, which is situated away from the work places. Such frequent movements leads to wastage of lot of time and no steps are taken by the factory manager to eliminate such unnecessary movements of Pratap and his co-workers.
  - a. Which method of Taylor is over looked by the factory manager?
  - **b.** How can the frequent movements be avoided?
  - c. What kind of benefits will accrue to M/s Royal Industries after avoiding such unnecessary movements? [4 Marks]

Qs 4. Rajvir works as a plant superintendent in a carpet making factory. In order to complete the export orders on time, the production manager asks him to make the workers work over time whereas the finance manager is strictly against this practice because it will increase the cost of production. Moreover, Rajveer feels that since the company is manufacturing handmade carpets as well as machine made carpets there is lot of overlapping of activities. Therefore, there should be two separate divisions for both of them wherein each division should have its own in charge, plans and execution resources.

In context of the above case:

- a. Identify and explain the principle of management which is being violated.
- b. Also identify the principle of management that Rajveer feels should be implemented in the factory
- c. What are the differences between the principle of management as identified in part (a) and part (b) respectively.

[ 4 Marks ]

- Qs 4. Explain the following with respect to Techniques of scientific Management
  - a. Motion Study
- b. Functional Foremanship

[ 6 Marks ]

#### Section B

- Qs 1. What is Collective Bargaining? How collective bargaining is beneficial to employers [ 6 Marks ] and employees.
- Qs 2. Briefly state the provisions in Factories Act, 1948 about the following
- a) Working Hours
- b) Overtime Wages c) Child Employment

[ 9 Marks ]

- Qs 3. Deepak's father has retired as a purchase manager of a company.
  - a) At what level of management was he working?
  - b) What function do you think he was performing at that level of management?

[5 Marks]

#### Section C

Qs 1. A chain of auto components store wishes to build a new distribution centre to serve the Eastern region of India. It is considering three possible locations namely Durgapur, Haldia and Kalyani . Table depicts the factors, weights, and ratings being considered. Which city should they choose?

		Ratings		
Factor	Weights	Durgapur	Haldia	Kalyani
Nearness to Markets	20	4	1	2
Labour Costs	5	5	8	. 6
Taxes	15	7	7	5
Nearness to Suppliers	10	4	2 -	1

[6 Marks]

**Qs 2.** A new facility is going to be established in Kolkata. Customers will travel from the seven locations to the new facility when they need service. The co-ordinates for the centre of each location, along with the projected populations, measured in thousands are given here. Table depicts the details of the seven centres and co-ordinate distances along with the population for each centre. Find the target area's centre of gravity for the new facility.

SI. No	Centres	Co – ordinate Distances (Xi Yi.)	Population ( L )
1	A s	(3,4.5)	6
2	В	(2.2,5)	5
3	С	(10,4.5)	2
4	D	(5, 2)	14
5	Е	(6,6)	8
6	F	(9,3)	18
7	G	(9,4)	15

[ 8 Marks ]

Qs 3. Distinguish between a Process Layout and a Product Layout

[6 Marks]

## **SECTION D**

Qs 1. Discuss Various stages of Product Life Cycle

[5 Marks]

Qs 2. What is Marketing Mix? What Are the 4 Ps of a Marketing Mix?

[5 Marks]

**Qs 3.** Marketing is a mixture of various activities that will get the consumer to buy a product. These activities are referred to as marketing functions. Discuss about these functions

[5 Marks]

Qs 4. Differentiate between Monopoly , Oligopoly and Monopolistic Competition with suitable examples [5 Marks]

#### **SECTION E**

Qs 1. What is Codification of Material? Explain Systems of Codification

[ 5 Marks ]

**Qs 2.** What are the benefits of Inventory Management?

[ 5 Marks ]

Qs 3. Materials Forecasting is a key tool for understanding and managing how direct material costs affect a company's future gross margins and profitability. Explain? [4 Marks]

Qs 4. What is the importance of materials management

[6 Marks]

### **SECTION F**

- Qs 1. Differentiate between Venture Capital Firms, Private Equity Firms and Factoring Companies [6 Marks]
- **Qs 2**. From the following particulars, calculate:
  - (i) Break-even point in terms of sales value and in units.
  - (ii) Number of units that must be sold to earn a profit of ₹. 90,000

Fixed Factory Overhead Cost

: ₹60000

Fixed Selling Overheads Cost

: ₹ 12000

Variable Manufacturing Cost Per Unit

:₹12

Selling Price Per Unit

: ₹ 24

[6 Marks]

# Qs 3. A company has the following particulars

Current assets

: ₹. 1,50,000

Current liabilities

: ₹ 75,000

Gross profit

: ₹ 50,000

Total revenue

: ₹ 2,00,000

Total Debt

: ₹ 1,00,000

Total Equity

:₹ 2,00,000

Cost of Goods Sold

: ₹ 1,20,000

Average inventory

: ₹ 30,000

Calculate the value and inference from the value obtained for each of the following:

- a. Current Ratio
- b. Gross Profit Margin
- c. Debt-to-Equity Ratio
- d. Inventory Turnover Ratio

[8 Marks]