School of Business

MBA
ETE - May 2023

Time : 3 Hours   Marks : 50

Sem IV - MBOP6014 - Supply Chain Analytics
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1. Differentiate the concept of Data Analytics and Business Analytics.   K2 CO1 (2)

2. Discuss the importance of drivers in value chain framework of the supply chain.   K2 CO2 (2)

3.   K4 CO3 (2)

Vendor	Price (Rs)	Cpk (index)	Defects (ppm)
1	55	0.94	105655
2	82	3	3.4
3	46	0.85	158655
4	62	1	66805
5	44	1.2	22755
6	62	1.6	1355
7	66	1.35	6205

Determine the Ranking method of supplier selection for selecting the best supplier. The suppliers' data of their price, defects and PC Index.

4. Examine the algorithms for Minimal Spanning Tree network distribution model.   K4 CO4 (2)

5. Examine important factors of Space Determination in Warehouse Planning.   K4 CO5 (2)

6. Evaluate six main value drivers of supply chain 4.0 perspective in enhancing supply chain management.   K4 CO1 (5)

7. Examine the operations involved in developing Supply Chain Network Planning and its benefits.   K4 CO2 (5)

8. Compare the differences between a Holding Warehouse and a Distribution Warehouse.   K5 CO5 (6)

9.   K5 CO3 (8)

S.N.	Factors	Weightage	Location Score (100)		
			Kanpur	**Jaipur**	**Jammu**
1	Proximity to Source	.10	90	70	80
2	Road Traffic	.05	80	80	85
3	Rentals	.35	70	90	100
4	Size	.15	85	92	75
5	Design	.20	80	70	65
6	OC	.15	80	90	85

Appraise the best Facility location alternative for setting up a Warehouse by Factor Rating method.

PTO

10.

Vendor	Price (Rs)	Cpk (index)	Defects (ppm)
1	55	0.94	105655
2	85	2	3.38
3	47	0.84	158655
4	64	1	66810
5	45	1.2	22755
6	65	1.55	1355
7	68	1.35	6210

K5 CO4 (8)

Meaure the Rating method for vendor selection in identifying the best supplier. The suppliers is available with their Price, Defects, and PCI.

11. **Case Study: Apple vs. Gateway Supply Chain**
Read the following case and attempt the questions given below:

K6 CO5 (8)

Apple and Gateway were two major computer manufacturers that had different approaches to their supply chains. Apple's supply chain was known for its focus on innovation, efficiency, and sustainability, while Gateway's supply chain was characterized by a more traditional and centralized approach.

Apple's supply chain was built around close collaboration with its suppliers, including the use of long-term contracts and joint development agreements. The company also used advanced technology and data analytics to optimize its inventory and reduce waste. In addition, Apple implemented a strict code of conduct for its suppliers, requiring them to adhere to high ethical and environmental standards.

On the other hand, Gateway's supply chain was more centralized, with the company relying on a few key suppliers for its components. This approach allowed Gateway to negotiate lower prices, but it also made the company more vulnerable to supply chain disruptions and quality issues.

As a result of these different supply chain strategies, Apple was able to consistently deliver high-quality products to its customers, while Gateway struggled with product delays and quality issues.

Questions (Any two):
a. List out the key features of Apple's supply chain.
b. Analyze how Apple collaborate with its suppliers to optimize its supply chain.
c. Compare the supply chains of Gateway and Apple.