School of Business

Department of Business
Mid Term Examination

Exam Date: 30 Sep 2023
Time : 90 Minutes
Marks : 50

Sem III - MBLS6020 - Distribution and Transportation Management

Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1)	Explain the role of materials handling in the supply chain and its impact on operational efficiency.	K2 (2)
2)	Define "Recruitment" in the context of transportation operations.	K1 (3)
3)	Illustrate two factors to consider when selecting vehicles for a delivery fleet.	K2 (4)
4)	Explain the significance of selecting and managing drivers in transportation operations.	K2 (6)
5)	Identify the advantages of buying new vehicles versus leasing them for a transportation company.	K3 (6)
6)	Explain the importance of key performance indicators (KPIs) in assessing the efficiency of order processing, packaging, distribution, and transportation operations in a supply chain. Identify examples of KPIs used for each aspect.	K3 (9)
7)	ABC Logistics is a rapidly growing logistics company. The management is faced with a decision to acquire new vehicles to expand their fleet. Analyze the factors that the company should consider when selecting the vehicles, such as payload capacity, fuel efficiency, and maintenance costs. Construct a cost-benefit analysis of purchasing new vehicles versus leasing, considering factors like initial investment, depreciation, and long-term usage. Based on your analysis, infer the most suitable approach for ABC Logistics to acquire new vehicles while optimizing their overall fleet management.	K4 (8)
8)	A transportation company has three trucks with different fuel efficiencies: Truck A (4 miles per gallon), Truck B (6 miles per gallon), and Truck C (8 miles per gallon). Each truck travels a distance of 200 miles daily. examine the daily fuel consumption for each truck and the total fuel cost for a month (considering 30 days) at the current fuel price of $3.5 per gallon.	K4 (12)

OR

A distribution company aims to improve its sustainability, energy management, and quality performance across its operations. Conduct an in-depth analysis of the company's current practices and identify areas where sustainable practices, energy-efficient technologies, and quality management principles can be implemented. List specific initiatives, such as the use of renewable energy sources, optimizing transportation routes to reduce fuel consumption, implementing ISO quality standards, and adopting eco-friendly packaging materials. Infer a cost-benefit analysis to demonstrate the economic and environmental advantages of these initiatives. Explain the role of Information Technology (IT) and Enterprise Resource Planning (ERP) systems in tracking and monitoring sustainability metrics and energy efficiency improvements. Define a comprehensive case study that showcases how the distribution company successfully integrated sustainability measures into its operations, resulting in improved energy management, reduced environmental impact, and enhanced customer satisfaction.

K4 (12)