Graphic Era
HILL UNIVERSITY
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University under section 2(f) of UGC Act, 1956

End Term (Odd) Semester Examination November 2025

Roll no...............................

Name of the Course and semester: MBA III
Name of the Paper: *Retail Logistics*
Paper Code: MBA 303 (SC2)

Time: 3-hour   Maximum Marks: 100

Note:
- *(i)* This question paper contains two Sections-Section A and B
- *(ii)* Both Sections are compulsory
- *(iii)* Answer any two sub questions from a, b & c in each main question of Section A. Each sub question carries 10 marks.
- *(iv)* Section B, consisting of a case study, is compulsory. It is of 20 Marks.

Section A

Q1.   (2X10=20 Marks)CO-1
a. Explain the role of logistics in retail with suitable examples.
b. Discuss how customer service influences retail logistics performance.
c. Describe the evolution of retail in India with focus on key retail segments.

Q2.   (2X10=20 Marks)CO-2
a. Explain demand forecasting methods used in retail supply chains.
b. Discuss supply chain network design with a simple diagram.
c. Explain the concept of Omni-channel retailing with its benefits.

Q3.   (2X10=20 Marks)CO-3
a. Describe warehouse layout planning with a neat diagram.
b. Explain inventory control techniques used in retail logistics.
c. Discuss last-mile delivery challenges in retail logistics.

Q4.   (2X10=20 Marks)CO-4
a. Explain different modes of transportation used in retail logistics.
b. Discuss the impact of customs, duties, and documentation in global retail logistics.
c. Explain the role of AI and RFID in improving retail logistics efficiency.

Section B

Q5. Case Study   (20 Marks)CO-5

Case: The Big Decision at TrendZ Mart Retail Chain

TrendZ Mart is a mid-sized omni-channel retail chain in India with **120 stores** and a growing online delivery business. Over the past two years, the company has focused on rapid expansion but is now struggling with operational inefficiencies in its retail logistics.
The major problems include:

- **40% of deliveries are delayed,** especially grocery and fashion categories.
- **Inventory mismatch between stores and online app,** leading to frequent order cancellations.
- **Very high logistics cost (28% of sales revenue),** much above the industry average of 15–18%.

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- Poor warehouse utilization and manual picking errors.
- Customers shifting to competitors due to inconsistent delivery experience.

To fix these issues, the CEO is considering **TWO strategic options**, but the company can afford **only one major investment this year:**

Option A: Fully Automated Warehousing + RFID Implementation

Automated sorters, conveyor systems, RFID tagging
Real-time stock visibility across all stores
Higher order accuracy, faster processing, reduced manual errors
BUT
Requires high investment
Implementation may take 9–12 months
Needs workforce re-skilling

Option B: AI-Based Route Optimization + Last-Mile Delivery Partnership

Outsource last-mile delivery to 3PL partners
Use AI software to optimize delivery routes
Quick implementation (2–3 months)
Immediate reduction in delivery delays and cost
BUT
Inventory and warehouse problems remain unsolved
Dependency on third-party logistics may impact service control
Limited long-term competitive advantage

DILEMMA

The CEO must decide:
Should TrendZ Mart invest in automation and RFID for long-term logistics transformation (Option A), or partner with 3PL and deploy AI routing for quick operational relief (Option B)?

a. Evaluate Option A and Option B using the parameters of **cost, implementation time, operational efficiency, risk, and long-term strategic benefit**. Which option aligns better with retail logistics competitiveness? Justify. *(10 Marks)*

b. Assume you are the Logistics Head of TrendZ Mart. Prepare a **step-by-step implementation roadmap for the selected option**, including key actions, expected outcomes, and technologies used. *(10 Marks)*