Name: Enrolment No:	

UPES
End Semester Examination, December 2025

Course: Logistics Planning Strategy **Semester: V**
Program: BBA_ALL_B.COM.HONS_INT.BBA_MBA **Time : 03 hrs.**
Course Code: LSCM3011 **Max. Marks: 100**

Instructions:
1. Read all questions carefully before answering.
2. Write your Name and Enrolment Number clearly on the answer booklet.
3. Attempt all questions/sections as instructed in the question paper.
4. Use only blue/black pen and write legibly; draw diagrams in pencil.
5. Do not use mobile phones or any electronic devices during the exam.

SECTION A
10Qx2M=20Marks

S. No.	Statement of question	Marks	CO
Q1.	Define Logistics Strategy.	2	CO1
Q2.	What is meant by Network Design?	2	CO1
Q3.	Mention any two reasons why warehouses are needed.	2	CO1
Q4.	What is Vendor Managed Inventory (VMI)?	2	CO1
Q5.	Define FSN Classification.	2	CO1
Q6.	State any one characteristic of a Smart Warehouse.	2	CO1
Q7.	Mention one key factor used in Integrated Logistics Planning.	2	CO1
Q8.	True/False: Transportation cost is directly proportional to delivery speed.	2	CO1
Q9.	True/False: Cycle Counting is a daily stock verification method done without shutting the warehouse.	2	CO1
Q10.	True/False: Smart Warehouses rely only on manual labour and not on automation.	2	CO1

SECTION B
4Qx5M= 20 Marks

Q11.	Using the Broad Framework for Logistics Planning & Strategy, explain the 4P + R model (Plan, Place, Push/Pull, Path, Resilience) with examples from Indian logistics.	5	CO2
Q12.	Explain the difference between Owned Warehouse and Outsourced 3PL Warehouse using cost structure (fixed vs variable), flexibility, and control. Provide 1 real company example.	5	CO2
Q13.	Describe the basic Activity Triggers in warehouse operations (Inbound, Storage, Outbound, Cycle Triggers). Why do triggers matter for KPIs like OTIF and lead time?	5	CO2

Q14.	A company promises delivery of 850 orders per day. Actual deliveries completed on time = 765. Calculate: a) Fill Rate b) On-Time Delivery (OTD). Interpret both results and comment on customer satisfaction.	**5**	**CO2**
	SECTION-C **3Qx10M=30 Marks**		
Q15.	Explain Integrated Planning & Activity Sets (Week 1–4 S&OP/IBP cycle) and show how Indian companies like Flipkart or ITC use it to prevent stockouts or excess inventory.	**10**	**CO3**
Q16.	A company shipped 3,000 orders yesterday. • Orders delivered on time: 2,700 • Orders delivered full (correct quantity): 2,550 • Orders delivered both on-time AND in-full: 2,460 Calculate: a) Fill Rate, b) OTD, c) OTIF. Interpret what the OTIF result reveals about the quality of logistics.	**10**	**CO3**
Q17.	Analyse the strategic role of warehousing decisions (Ownership, Number, Location, Design). Provide examples of how these decisions influence cost and service performance in Indian logistics networks.	**10**	**CO3**
	SECTION-D **2Qx15M= 30 Marks**		
Q18.	**Case Study:** **Flipkart's Northeast Dilemma: Build or Buy?** In 2026, Flipkart planned an aggressive expansion into the Northeast region of India, driven by a 34% annual rise in e-commerce orders from Guwahati, Shillong, Jorhat and Agartala. Despite demand growth, their logistics performance in the region was weak—average OTD of only 72% and OTIF of 66%, mainly due to poor road connectivity and long-haul transit from Kolkata. Flipkart's central team is evaluating two network expansion strategies: Option A — Build an Owned Fulfilment Centre (FC) in Guwahati • Fixed Cost: ₹25,00,000 per month • Handling Capacity: 50,000 orders per month • Variable Cost: ₹20 per order • High control, faster processing, lower damages • CAPEX requires multi-year commitment Option B — Outsource to a 3PL Partner • No fixed cost • Variable Cost: ₹55 per order • Flexible capacity, zero capex • Lower control on service & compliance • Estimated OTD improvement only 5–8% Projected demand (monthly): • Year 1: 20,000 orders • Year 2: 35,000 orders • Year 3: 50,000 orders Flipkart aims to achieve: • OTD ≥ 90% • Fill Rate ≥ 95%	**15**	**CO4**

	• Logistics cost reduction by 10% • Faster returns processing for electronics **Answer the following questions based on above Case study:** a) Calculate total monthly cost for Option A and B for all three years. b) Determine the break-even monthly volume at which owning becomes cheaper. c) Analyse the service performance impact of both options (OTD, OTIF, control, inventory accuracy). d) As Flipkart's Logistics Strategy Manager, recommend the better long-term strategy using a cost–service–resilience framework.		
Q19.	Breakdown logistics for apparel company into functions and activities; explain in details challenges faced in different functions	**15**	**CO4**