Sub. Code 654201

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Second Semester

Logistic and Supply Chain Management BUSINESS RESEARCH METHODOLOGY

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. Which of the following is NOT a type of research? (CO1, K2)
 - (a) Pure Research
 - (b) Applied Research
 - (c) Descriptive Research
 - (d) Speculative Research
- 2. What is the first step in the research process? (CO1, K2)
 - (a) Formulating a hypothesis
 - (b) Identifying a research problem
 - (c) Reviewing literature
 - (d) Collecting data

3.		ich sampling method ensures that every member of population has an equal chance of being selected? (CO2, K3)	
	(a)	Convenience Sampling	
	(b)	Stratified Sampling	
	(c)	Quota Sampling	
	(d)	Snowball Sampling	
4.	Wha	at is the primary purpose of a research	arch design? (CO2, K3)
	(a)	To collect data	
	(b)	To analyze data	
	(c)	To provide a framework for the research	h
	(d)	To present findings	
5.	Whi	ch of the following is a primary sou	rce of data? (CO3, K4)
	(a)	Government publications	
	(b)	Interviews	
	(c)	Journal articles	
	(d)	Textbooks	
6.	Wha	at is the main purpose of a pilot study?	CO3, K4)
	(a)	To finalize the research report	
	(b)	To test the research instruments	
	(c)	To analyze the data	
	(d)	To formulate the hypothesis	
		2	R2953

7.	Which statistical test is used to compare the means of two populations? (CO4, K4)			
	(a)	Chi-square test		
	(b)	ANOVA		
	(c)	t-test		
	(d)	Regression analysis		
8.	What	t is the purpose of hypothesis testing in	research? (CO4, K4)	
	(a)	To collect data		
	(b)	To validate or reject assumptions		
	(c)	To design the research		
	(d)	To present the findings		
9.	Which section of a research report provides a brief overview of the entire study? (CO5, K5)			
	(a)	Introduction		
	(b)	Executive summary		
	(c)	Methodology		
	(d)	Conclusion		
10.	What is the primary purpose of visual aids in an oral presentation? (CO5, K5)			
	(a)	To entertain the audience		
	(b)	To provide detailed data		
	(c)	To enhance understanding and retention		
	(d)	To replace the presenter		
		3	R2953	

Part B

 $(5 \times 5 = 25)$

Answer all the questions in not more than 500 words each.

11. (a) Explain the different types of research with examples. (CO1, K2)

Or

- (b) Discuss the steps involved in formulating a research problem. (CO1, K2)
- 12. (a) Compare and contrast probability and non-probability sampling methods. (CO2, K3)

Or

- (b) Explain the factors affecting the size of a sample in research. (CO2, K3)
- 13. (a) Discuss the various methods of data collection in research. (CO3, K4)

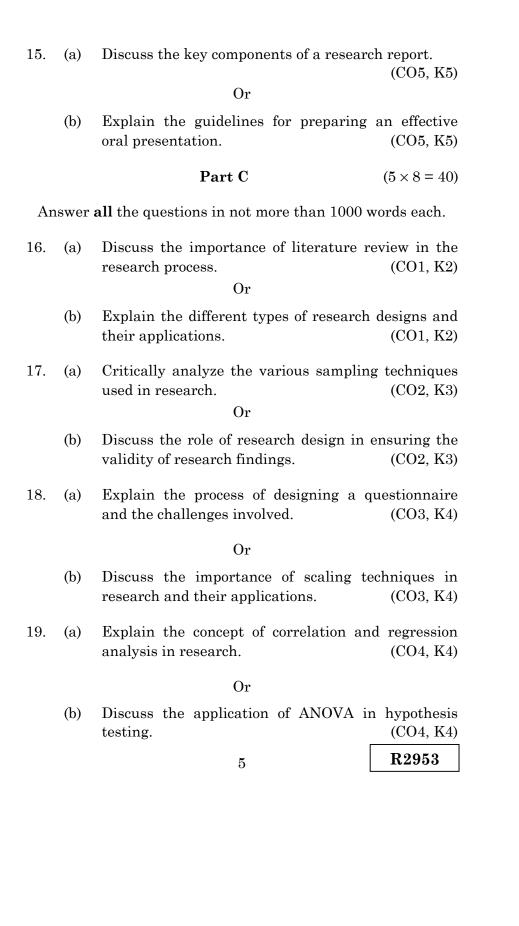
Or

- (b) Explain the importance of validity and reliability in research instruments. (CO3, K4)
- 14. (a) Describe the process of hypothesis testing in research. (CO4, K4)

Or

4

(b) Explain the measures of central tendency and their significance in data analysis. (CO4, K4)



20. (a) Discuss the structure and format of a research report, highlighting its key components. (CO5, K5)

Or

(b) Explain the role of visual aids in enhancing the effectiveness of an oral presentation. (CO5, K5)

Sub. Code 654202

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Second Semester

Logistics and Supply Chain Management SUPPLY CHAIN FINANCE OPERATIONS

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. Supply chain management control or link the production to _____ (CO1, K1)
 - (a) directing
 - (b) distribution
 - (c) finance
 - (d) human resource
- 2. Which one is not an element in the primary activities of a value chain? (CO1, K1)
 - (a) Procurement
 - (b) Inbound logistics
 - (c) Outbound logistics
 - (d) Service

3.	Which busin	ch report gives a review on the profitability of a ness? (CO2, K2)
	(a)	Statement of changes in equity
	(b)	Cash flow statement
	(c)	Balance sheet
	(d)	Income statement
4.	Curr	ent assets are also known as (CO2, K2)
	(a)	Cash (b) Assets
	(c)	Invested capital (d) Working capital
5.	Liqu:	id Ratio is equal to liquid assets divided by (CO3, K4)
	(a)	Current Liabilities
	(b)	Total Liabilities
	(c)	Contingent Liabilities
	(d)	Non-Current Liabilities
6.	Two	basic measures of liquidity are (CO3, K4)
	(a)	Current ratio and Quick ratio
	(b)	Gross Profit ratio and Operating ratio
	(c)	Current ratio and Average collection period
	(d)	Inventory turnover and Current ratio
7.	cost	ch of the following methods involves computing the of capital by dividing the dividend by market /net proceeds per share? (CO4, K4)
	(a)	Adjusted price method
	(b)	Price earning method
	(c)	Dividend yield method
	(d)	Adjusted dividend method
		2 R2954

- 8. The decision to request an increase the resources for a project is the responsibility of the (CO4, K4)
 - (a) functional manager
 - (b) project manager
 - (c) director of project management
 - (d) customer
- 9. Supply network design is important because (CO5, K5)
 - (a) It allows organizations to reduce the number of suppliers
 - (b) It improves the relationship between internal and external suppliers
 - (c) Every operation is part of a larger and interconnected network of operations
 - (d) It allows marketing more influence over the choice of suppliers
- 10. What is the purpose of DuPont analysis in evaluating a company's performance? (CO5, K5)
 - (a) To determine the total assets of a company
 - (b) To calculate the total equity of a company
 - (c) To assess the market value of a company
 - (d) To evaluate how different aspects of performance affect profitability as measured by ROE (CO5, K5)

R2954

Part B $(5 \times 5 = 25)$

Answer all the questions not more than 500 words each.

11. (a) Differentiate value chain and supply chain. (CO1, K1)

Or

(b) List down the impact of supply chain on finance. (CO1, K1)

12. (a) Explain the components of income statement. (CO2, K2)

Or

- (b) Elaborate the concept and purpose statement of cash flows. (CO2, K2)
- 13. (a) What are the uses of financial ratios? (CO3, K4)

Or

- (b) Explain the concept of non-cash transactions with suitable example. (CO3, K4)
- 14. (a) What are the factors contributing to competitive advantage? (CO4, K4)

Or

(b) Discuss the steps involved in the process of project selection. (CO4, K4)

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15. (a) Explain the components of DuPont analysis. (CO5, K5) Or What is a supply chain network design? Explain the (b) approaches involved in supply chain network. (CO5, K5) Part C $(5 \times 8 = 40)$ Answer all the questions in not more than 1000 words each. 16. (a) Discuss the aspects of supply chain and operations value proposition. (CO1, K1) Or (b) Explain the role of supply chain management. (CO1, K1)17. (a) Describe the uses of financial statements. (CO2, K2) Or (b) Elaborate the elements of financial statements. (CO2, K2) 18. Elaborate the types of financial ratios. (CO3, K4) (a) Or (b) What is meant by asset management ratios? Explain its types. (CO3, K4)19. (a) Define cost of capital. Describe its types. (CO4, K4) Or (b) Describe the process of project implementation. (CO4, K4) R2954 5

20. (a) What is a supply chain network? Discuss the purpose of and steps involved in supply chain network. (CO5, K5)

Or

(b) Define DuPont analysis and explain how it works. (CO5, K5)

Sub. Code

654203

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Second Semester

Logistics and Supply Chain Management

PRODUCTION AND OPERATIONS MANAGEMENT

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. Which of the following best describes Batch Production? (CO1, K2)
 - (a) Producing products one at a time as per customer requirements
 - (b) Producing a group of similar products together before switching to another product
 - (c) Producing standardized products in large quantities
 - (d) Producing complex and one-time projects
- 2. Reverse engineering is used for which of the following purposes? (CO1, K2)
 - (a) Product improvement
 - (b) Understanding competitor products
 - (c) Recovering lost designs
 - (d) All of the above

3.	to w	mpany using remote work policies to allow employees ork from different locations a on different products is xample of (CO2, K3)
	(a)	Production flexibility
	(b)	Locational flexibility
	(c)	Financial flexibility
	(d)	Product customization

- 4. A company is evaluating three potential locations for a new plant using Break-even Analysis. Which of the following factors would be the most critical in decision-making? (CO2, K3)
 - (a) The number of employees working at each location
 - (b) The break-even output level at each location
 - (c) The total revenue generated by the company
 - (d) The historical sales data of competitors
- 5. Which of the following tools is commonly used in Method Study for analyzing processes? (CO3, K3)
 - (a) Gantt Chart (b) String Diagram
 - (c) Pert chart (d) Balance Sheet
- 6. In Time Study, why is allowance time added to the normal time? (CO3, K3)
 - (a) To account for personal needs, fatigue, and unavoidable delays
 - (b) To increase worker productivity artificially
 - (c) To extend work shifts beyond normal hours
 - (d) To reduce the overall cost of production

- 7. What is the primary limitation of CRAFT in facility layout optimization? (CO4, K4)
 - (a) It only works for product-based layouts
 - (b) It requires an existing layout as a starting point and may not find the global optimal solution
 - (c) It completely eliminates the need for human decision-making
 - (d) It is only applicable for large-scale factories
- 8. In which of the following scenarios is LOB most effectively applied? (CO4, K4)
 - (a) High-volume, repetitive projects like road construction or housing development
 - (b) One-time, highly variable projects like research and development
 - (c) Projects with random, unpredictable workflows
 - (d) Projects that do not require scheduling
- 9. A hospital uses a color-coded wristband system to indicate patient allergies, ensuring that staff do not administer the wrong medication. What type of Poka-Voke technique is applied? (CO5, K5)
 - (a) Fixed-Value Method
 - (b) Contact Method
 - (c) Warning Method
 - (d) Control Method

- 10. A consulting firm is comparing a Gantt chart and a PERT chart for a complex project. What is an advantage of using a Gantt chart over a PERT chart? (CO5, K5)
 - (a) Gantt charts provide a clear visual timeline of task progress
 - (b) Gantt charts eliminate the need for project scheduling software
 - (c) Gantt charts automatically calculate the critical path
 - (d) Gantt charts are better suited for uncertain task durations

Part B $(5 \times 5 = 25)$

Answer all questions not more than 500 words each.

11. (a) How does modularization improve flexibility in manufacturing and design? (CO1, K2)

Or

- (b) Describe how assembly line balancing helps in reducing idle time. (CO1, K2)
- 12. (a) A manufacturing company is experiencing high transportation costs. What location adjustments can be made to minimize expenses? (CO2, K3)

Or

(b) A hospital is planning to build a new wing. What are the key facility design considerations to ensure efficient patient flow? (CO2, K3)

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13. (a) If a company is producing customized furniture, which type of production process system should it adopt, and why? (CO3, K3)

Or

- (b) How does work study help in improving productivity in a manufacturing environment? (CO3, K3)
- 14. (a) How does group technology (GT) influence the design and efficiency of a cellular layout? (CO4, K4)

Or

- (b) How does aggregate production planning help in balancing demand and capacity while minimizing costs? (CO4, K4)
- 15. (a) How does GERT differ from PERT and CPM, and in what types of projects is it more advantageous? (CO5, K5)

Or

(b) How does BPR differ from continuous improvement approaches like Kaizen and TQM? Evaluate its effectiveness in large-scale organizational change.

(CO5, K5)

Answer all questions not more than 1000 words each.

Part C

16. (a) What is a Job Shop Manufacturing System, and how does it differ from other manufacturing systems? (CO1,K2)

Or

(b) What are the main objectives of standardization and how does standardization improve product quality? (CO1, K2)

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 $(5 \times 8 = 40)$

17. (a) How does capacity planning help in cost reduction and resource optimization? (CO2, K3)

Or

- (b) How can a manufacturing company determine its optimal production capacity to meet market demand? (CO2, K3)
- 18. (a) How can a company design an efficient production process system to maximize productivity? (CO3, K3)

Or

- (b) How can time study help in reducing production costs and improving efficiency? (CO3, K3)
- 19. (a) What challenges do organizations face when implementing ALDEP for facility layout design? (CO4, K4)

Or

- (b) What are the key differences between process layout and product layout in terms of functionality and objectives? (CO4, K4)
- 20. (a) What challenges do companies face when implementing Lean Manufacturing principles? (CO5, K5)

Or

(b) What are the main principles of TQM, and how do they work together to improve quality? (CO5, K5)

Sub. Code 654204

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Second Semester

Logistics and Supply Chain Management EXPORT AND IMPORT MANAGEMENT

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. What is the primary function of an export compliance department? (CO1, K2)
 - (a) Increasing sales
 - (b) Ensuring legal and regulatory compliance
 - (c) Managing warehouse operations
 - (d) Reducing tax liabilities
- 2. Which type of law affects export and import operations? (CO1, K2)
 - (a) Federal law
 - (b) State law
 - (c) International law
 - (d) All of the above

- 3. Which document is used for an ongoing sales transaction in international trade? (CO2, K2)
 - (a) Bill of Lading
 - (b) Export Distributor Agreement
 - (c) Purchase Order
 - (d) Proforma Invoice
- 4. The Foreign Corrupt Practices Act (FCPA) is primarily concerned with (CO2, K2)
 - (a) Reducing import duties
 - (b) Preventing bribery and corruption in international business
 - (c) Increasing export tariffs
 - (d) Managing inventory
- 5. Which agreement governs relationships between importers and foreign suppliers? (CO3, K3)
 - (a) Export distributor agreement
 - (b) Import distributor agreement
 - (c) Letter of Credit
 - (d) Sales Tax Agreement
- 6. What is the primary purpose of an Import Sales Agent Agreement? (CO3, K3)
 - (a) To set terms for selling imported goods
 - (b) To determine product pricing
 - (c) To reduce transportation costs
 - (d) To avoid customs duties

7.		at does the term "transaction value" refer to in oms valuation? (CO4, K4)
	(a)	The estimated market price
	(b)	The actual price paid or payable for goods
	(c)	The shipping cost of goods

- 8. The country of origin for a product is determined based on (CO4, K4)
 - (a) The location of final sale

The customs duty rate

(d)

- (b) The country where the product was first sold
- (c) Tariff-shift rules and regional value content
- (d) The lowest duty rate applicable
- 9. What is a drawback in international trade? (CO5, K5)
 - (a) A restriction on exports
 - (b) A refund of duties paid on imported goods when reexported
 - (c) A tax imposed on foreign-made goods
 - (d) A penalty for violating customs regulations
- 10. Which of the following is a form of countertrade?(CO5, K5)
 - (a) Barter
 - (b) Stock options
 - (c) Letter of Credit
 - (d) E-commerce transactions

Answer all the questions not more than 500 words each.

11. (a) Explain the importance of record-keeping compliance in export and import operations. (CO1, K2)

Or

- (b) What are the key responsibilities of an export compliance department? (CO1, K2)
- 12. (a) Differentiate between isolated and ongoing sales transactions in exports. (CO2, K2)

Or

- (b) What are the key components of an Export Distributor Agreement? (CO2, K2)
- 13. (a) Describe the significance of Import Sales Agent Agreements. (CO3, K3)

Or

- (b) Explain the documentation required for an insolated purchase transaction. (CO3, K3)
- 14. (a) What are the methods used to determine the proper value of goods for customs? (CO4, K4)

Or

(b) Explain the role of tariff-shift rules in determining the country of origin. (CO4, K4)

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import-export trade? (CO5, K5) Or (b) Explain the concept of counter trade and give two (CO5, K5) examples. Part C $(5 \times 8 = 40)$ Answer all the questions not more than 1000 words each. 16. (a) Discuss the legal considerations in managing export and import operations. (CO1, K2) OrExplain the role of compliance (b) software in international trade management. (CO1, K2) 17. (a) How do sales agent agreements facilitate international trade? Discuss with examples. (CO2, K2) Or (b) Explain the significance of the Foreign Corrupt (CO2, K2) Practices Act in global trade. different 18. (a) Describe the of purchase types transactions in imports. (CO3, K3) Or(b) What are the legal and regulatory considerations for import documentation? (CO3, K3) R2956 5

What are the different types of drawbacks in

15.

(a)

19. (a) Explain the General Rules of Interpretation for classifying goods under tariff schedules. (CO4, K4)

Or

- (b) Discuss the importance of preferential duty laws in international trade? (CO4, K4)
- 20. (a) Describe the process of foreign processing and assembly operations in export. (CO5, K5)

Or

(b) How do barter and counter trade transactions function in global trade? (CO5, K5)

Sub. Code

654205

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Second Semester

Logistics and Supply Chain Management

LOGISTICS LEGAL FRAMEWORK AND MARITIME DOCUMENTATION

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. Which of the following is not an essential element of a valid contract under the Indian Contract Act, 1872?
 (CO1, K2)
 - (a) Offer and acceptance
 - (b) Consideration
 - (c) Legality of object
 - (d) Verbal agreement
- 2. A quasi-contract is based on: (CO1, K2)
 - (a) Written agreement
 - (b) Implied obligation
 - (c) Breach of contract
 - (d) Third-party rights

3.	3. The Carriage of Goods by Sea Act, 1992 primarily go (CO:			
	(a)	Air freight contracts		
	(b)	Bill of lading functions		
	(c)	Railway liabilities		
	(d)	Consumer disputes		
4.	Which act allows statutory transfers of third-party rights in carriage contracts? (CO2, K2)			
	(a)	Bills of Lading Act, 1855		
	(b)	Railways Act, 1989		
	(c)	Consumer Protection Act, 1986		
	(d)	Carriers Act, 1865		
5.	Under the Indian Consumer Protection Act, 1986, a complaint must be filed within (CO3, K3)			
	(a)	6 months (b) 1 year		
	(c)	2 years (d) 3 years		
6.	Which Act governs the liability of common carriers for goods transported by road? (CO3, K3)			
	(a)	Carriage by Air Act, 1972		
	(b)	Carriers Act, 1865		
	(c)	Carriage by Road Act, 2007		
	(d)	Railways Act, 1989		
7.	The	East-West sea route is critical for transporting (CO4, K4)		
	(a)	Oil and gas		
	(b)	Electronics and textiles		
	(c)	Agricultural produce		
	(d)	Pharmaceuticals		
		2 R2957		

	(d)	Charter parties
9.		treboat charter transfers which responsibility to the terer? (CO5, K4)
	(a)	Crew management
	(b)	Navigation
	(c)	Cargo handling
	(d)	Fuel costs
10.		Conference System in freight determination is acterized by (CO5, K4)
	(a)	Fixed rates
	(b)	Dynamic pricing
	(c)	Government regulation
	(d)	Auction-based rates
		Part B $(5 \times 5 = 25)$
A	nswer	all the questions in not more than 500 words each.
11.	(a)	Explain the significance of "consideration" in forming a valid contract. (CO1, K2)
		O
		Or
	(b)	Describe the rights and duties of a bailor under the Indian Contract Act, 1872. (CO1, K2)

The IMO's MARPOL Convention primarily addresses

(CO4, K4)

8.

(a)

(b)

(c)

Ship security

Freight rates

Pollution prevention

12. (a) Summarize the key functions of a bill of lading in maritime contracts. (CO2, K2)

Or

- (b) How does the Carriage of Goods by Sea Act, 1992 modify traditional carriage contracts? (CO2, K2)
- 13. (a) Outline the procedure for filing a consumer complaint under the Consumer Protection Act, 1986. (CO3, K3)

Or

- (b) Apply the Carriers Act, 1865 to determine liability in a lost cargo scenario. (CO3, K3)
- 14. (a) Analyze the role of the International Maritime Organization (IMO) in regulating dangerous cargo. (CO4, K4)

Or

- (b) Compare coastal and ocean transportation in terms of trade volume and challenges. (CO4, K4)
- 15. (a) Differentiate between voyage charter and time charter agreements. (CO5, K4)

Or

(b) Evaluate the impact of technological advancements on freight rate dynamics. (CO5, K4)

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Answer all the questions in not more than 1000 words each.

16. (a) Discuss the legal consequences of a breach of contract under the Indian Contract Act, 1872.

(CO1, K2)

Or

- (b) Critically examine the concept of "capacity to contract" with relevant case laws. (CO1, K2)
- 17. (a) Elaborate on the statutory and common law provisions governing third-party rights in carriage contracts. (CO2, K2)

Or

- (b) How do non-contractual actions influence maritime dispute resolution? (CO2, K2)
- 18. (a) A cargo shipment was damaged during road transport. Using the Carriage by Road Act, 2007, draft a claim process. (CO3, K3)

Or

- (b) Assess the effectiveness of the Indian Consumer Protection Act, 1986 in addressing e-commerce disputes. (CO3, K3)
- 19. (a) Analyze the strategic importance of global sea routes in supply chain optimization. (CO4, K4)

Or

(b) Critically evaluate the IMO's class structure regulations for polluting cargoes. (CO4, K4)

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20. (a) Debate the advantages of the Competitive System over the Conference System in freight determination. (CO5, K4)

Or

(b) Propose a framework for integrating multi-modal transport systems with maritime logistics. $(CO5,\,K4)$

Sub. Code 654401

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Fourth Semester

Logistics and Supply Chain Management WAREHOUSE AND DISTRIBUTION MANAGEMENT

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

 $\mathbf{Part} \mathbf{A} \qquad (10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. Why do companies hold stock in warehouses? (CO1, K1)
 - (a) To create market demand artificially
 - (b) To reduce transportation time and ensure availability
 - (c) To lower operational costs
 - (d) To improve advertising strategies
- 2. Which supply chain trend is most closely linked to the rise of e-fulfillment? (CO1, K1)
 - (a) Outsourcing manufacturing
 - (b) Growth of online shopping and direct-to-consumer models
 - (c) Increasing reliance on fossil fuels
 - (d) Consolidation of warehouse locations

3.	Which process involves verifying the quantity	and quality
	of received goods against the purchase order?	(CO2, K1)

- (a) Offloading
- (b) Quality Control
- (c) Cross-docking
- (d) Replenishment
- 4. What is the main goal of cross-docking in warehouse operations? (CO2, K1)
 - (a) To store goods temporarily
 - (b) To reduce storage time and ship goods directly to their next destination
 - (c) To organize the pick area
 - (d) To improve inventory counting accuracy
- 5. Which order-picking method involves workers receiving spoken instructions through a headset? (CO3, K1)
 - (a) Pick by label
 - (b) Pick by voice
 - (c) Pick by light
 - (d) RFID
- 6. What is the primary advantage of barcode scanning in order-picking processes? (CO3, K1)
 - (a) It eliminates the need for physical storage.
 - (b) It reduces errors in identifying items.
 - (c) It enables verbal communication with pickers.
 - (d) It is faster than light-based systems.

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- 7. Which marketing force most significantly influences physical distribution strategies? (CO4, K1)
 - (a) Pricing strategy
 - (b) Customer service expectations
 - (c) Advertising methods
 - (d) Brand reputation
- 8. The "total system perspective" in physical distribution focuses on: (CO4, K1)
 - (a) Reducing costs of individual distribution activities
 - (b) Maximizing efficiency across all supply chain elements
 - (c) Prioritizing transportation over storage
 - (d) Focusing only on order processing
- 9. What is the primary function of intermediaries in a distribution channel? (CO5, K1)
 - (a) Eliminating the need for wholesalers
 - (b) Assisting in the smooth flow of goods and services
 - (c) Increasing production output
 - (d) Reducing transportation costs
- 10. Evaluating channel members involves assessing which of the following variables? (CO5, K1)
 - (a) Financial stability, market reputation, and geographic coverage
 - (b) Manufacturing costs and branding strategies
 - (c) Organizational structure and mission statement
 - (d) Product pricing and market segmentation

R2958

Part B

 $(5 \times 5 = 25)$

Answer all the questions in not more than 500 words each.

11. (a) Summarize the role of warehouses in the supply chain. (CO1, K2)

Or

- (b) What are the advantages of choosing a centralized warehouse location? (CO1, K1)
- 12. (a) Explain the significance of put-away in warehouse processes. (CO, K2)

Or

- (b) Compare and contrast the picker-to-goods and goods-to-picker strategies. (CO2, K2)
- 13. (a) Outline the advantages and limitations of RFID technology in warehouse order-picking processes. (CO3, K2)

Or

- (b) Identify how a Warehouse Management System optimizes the use of Automated Storage and Retrieval Systems. (CO3, K3)
- 14. (a) List and briefly examine the key functions of physical distribution. (CO4, K4)

Or

(b) Examine the marketing forces that impact physical distribution? (CO4, K4)

R2958

(a) Elaborate the importance of channel structure in the distribution process. (CO5, K6)
Or
(b) Deduct the factors which influence the selection of intermediaries in a distribution channel. (CO5, K5)
Part C (5 × 8 = 40)

Answer all the questions in not more than 1000 words each.

16. (a) Assess the advantages and disadvantages of specialized warehousing. (CO1, K5)

Or

- (b) Analyze the factors influencing warehouse location decisions. (CO1, K4)
- 17. (a) Evaluate the role of quality control in the receiving process and its impact on subsequent warehouse activities. (CO2, K5)

Or

(b) Elaborate how an optimized warehouse layout can improve pick preparation and picking strategies.

(CO2, K6)

18. (a) Evaluate the impact of shuttle technology on warehouse efficiency compared to traditional manual handling. (CO3, K5)

Or

(b) Critically assess the role of automated storage and retrieval systems (AS/RS) in improving warehouse productivity. (CO3, K5)

R2958

19. (a) Discuss the importance of physical distribution from a total systems perspective. (CO4, K6)

Or

- (b) Analyze the functions of physical distribution and their role in enhancing customer satisfaction. (CO4, K4)
- 20. (a) Measure the role of distribution channels in marketing, highlighting their significance for producers and consumers. (CO5, K5)

Or

(b) Determine the factors affecting the choice of distribution channels and how these influence business strategy. (CO5, K5)

Sub. Code 654402

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Fourth Semester

Logistics and Supply Chain Management ENTREPRENEURSHIP AND INNOVATION

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. Which of the following is a critical factor for starting a new enterprise? (CO1, K1)
 - (a) Employee satisfaction
 - (b) Evaluating the opportunity
 - (c) Government regulations
 - (d) Financial statements
- 2. Which resource is considered essential for a successful new business? (CO1, K1)
 - (a) Advertising budget
 - (b) Startup capital
 - (c) Stock market investments
 - (d) Political support

- 3. What is a key characteristic of sustainable entrepreneurship? (CO2, K2)
 - (a) Maximizing short-term profits
 - (b) Focusing on long-term social and environmental impact
 - (c) Ignoring technological advancements
 - (d) Operating only in developed countries
- 4. What is the primary role of business incubators in entrepreneurship? (CO2, K2)
 - (a) Managing taxation policies
 - (b) Providing training and support for startups
 - (c) Conducting international trade
 - (d) Expanding large corporations
- 5. Which of the following is NOT a component of technology transfer? (CO3, K3)
 - (a) Mechanisms of transfer
 - (b) Research and development agreements
 - (c) Strategic alliances
 - (d) Stock market analysis
- 6. What is the main barrier to successful technology transfer? (CO3, K3)
 - (a) High employee salaries
 - (b) Lack of innovation
 - (c) The vicious circle of underdevelopment
 - (d) Government incentives

- 7. What is a major challenge when transitioning from a startup to a growth-stage business? (CO4, K4)
 - (a) Deciding whether to grow or sell
 - (b) Reducing customer base
 - (c) Limiting product innovation
 - (d) Avoiding external funding
- 8. What factor is NOT a driving force for business growth? (CO4, K4)
 - (a) Leadership
 - (b) Organizational resources
 - (c) Political instability
 - (d) Execution strategy
- 9. Which of the following best defines social entrepreneurship? (CO5, K3)
 - (a) A business that focuses only on profits
 - (b) An organization that aims to address social problems through business solutions
 - (c) A corporation that expands globally
 - (d) A non-profit organization
- 10. What is the primary goal of a hybrid social enterprise? (CO5, K3)
 - (a) To compete with multinational corporations
 - (b) To balance social impact and financial sustainability
 - (c) To avoid government regulations
 - (d) To maximize shareholder returns

Part B

 $(5 \times 5 = 25)$

Answer all the questions in not more than 500 words each.

11. (a) Explain the key factors necessary for starting a new business. (CO1, K1)

Or

- (b) Discuss the importance of evaluating business opportunities before launching a startup. (CO1, K1)
- 12. (a) Define sustainable entrepreneurship and its significance in business. (CO2, K2)

Or

- (b) What is the role of business intelligence in entrepreneurial success? (CO2, K2)
- 13. (a) Explain the concept of technology transfer in innovation. (CO3, K3)

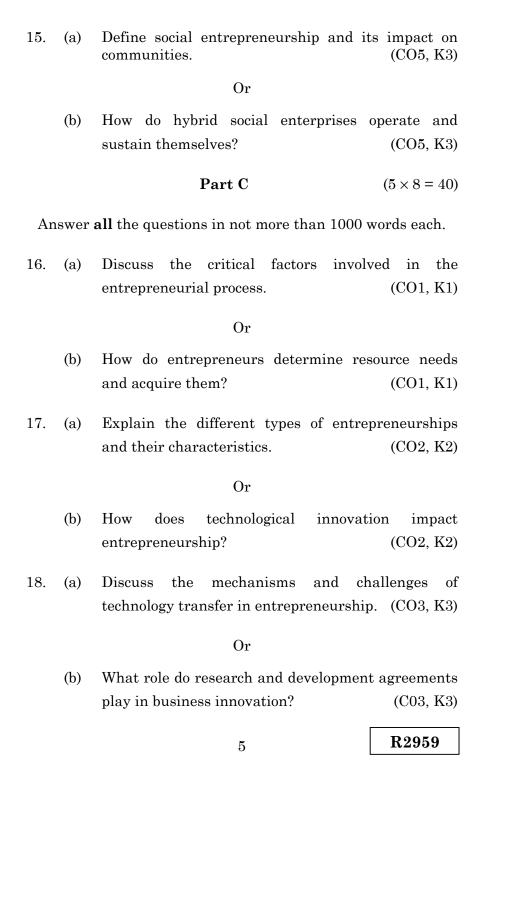
Or

- (b) Discuss the importance of strategic alliances in entrepreneurship. (CO3, K3)
- 14. (a) Explain the major challenges faced by startups transitioning to the growth stage. (CO4, K4)

Or

(b) What are the key leadership traits necessary for business growth? (CO4, K4)

R2959



19. (a) Explain the transition process from a startup to a growth-oriented business. (CO4, K4)

Or

- (b) Discuss the major driving forces behind business growth. (CO4, K4)
- 20. (a) What are the major components of social entrepreneurship? (CO5, K3)

Or

(b) How do nonprofit organizations utilize innovative business models for sustainability? (CO5, K3)

Sub. Code 6544E1

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Fourth Semester

Logistics and Supply Chain Management

Elective: PORT MANAGEMENT

(CBCS - 2022onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer all the questions by choosing the correct option

- 1. What is the primary role of port authorities? (CO1, K1)
 - (a) Managing only cargo operations
 - (b) Ensuring efficient port operations and development
 - (c) Handling only passenger transportation
 - (d) Regulating inland transportation
- 2. Which of the following factors affects port workforce productivity? (CO1, K1)
 - (a) Technological advancements
 - (b) Weather conditions
 - (c) Ownership structure
 - (d) All of the above

		2	R2960
	(d)	Ignoring international trade policies	
	(c)	Eliminating port security measures	
	(b)	Reduction in vessel size	
	(a)	Port risk assessment and management	
6.	Econ	nomic growth in port logistics is influence	ed by (CO3, K3)
	(d)	Reduced infrastructure investment	
	(c)	Increased taxation	
	(b)	High labor costs	
	(a)	Strategic pricing	
5.	Whie edge	ch of the following contributes to a port's?	s competitive (CO3, K3)
	(d)	Increase in manual labor	
	(c)	Reduction in global trade	
	(b)	Operational delays	
	(a)	Market accessibility	
4.		tegic location of seaports influences v	which of the (CO2, K2)
	(d)	Increased government intervention	
	(c)	Enhanced supply chain efficiency	
	(b)	Reduced market accessibility	
	(a)	Increased congestion at ports	
3.		t is the key advantage of integrating p logistics?	ort activities (CO2, K2)

7.	Tern	ninal operators are primarily responsible for (CO4, K3)
	(a)	Managing port regulatory frameworks
	(b)	Overseeing loading and unloading of cargo
	(c)	Handling only offshore support services
	(d)	Regulating international trade agreements
8.	Wha	t is the primary function of a port agent? (CO4, K3)
	(a)	Overseeing vessel and crew services
	(b)	Managing inland transportation
	(c)	Reducing cargo security measures
	(d)	Handling passenger operations only
9.		International Ship and Port Facility Security (ISPS) e focuses on (CO5, K3)
	(a)	Reducing vessel emissions
	(b)	Port security and safety measures
	(c)	Increasing import duties
	(d)	Eliminating customs regulations
10.		ch organization enforces the Vessel General Permit P) regulation? (CO5, K3)
	(a)	International Maritime Organization (IMO)
	(b)	US Environmental Protection Agency (EPA)
	(c)	World Trade Organization (WTO)
	(d)	International Labor Organization (ILO)

Part B

 $(5 \times 5 = 25)$

Answer all the questions not more than 500 words each.

11. (a) Explain the significance of port ownership structures in port management. (CO1, K1)

Or

- (b) Describe the role of port workforce productivity in operational efficiency. (CO1, K1)
- 12. (a) Discuss how strategic port location impacts supply chain efficiency. (CO2, K2)

Or

- (b) Explain the competition and conflict factors affecting port logistics. (CO2, K2)
- 13. (a) What are the key elements of a port's competitive edge? (CO3, K3)

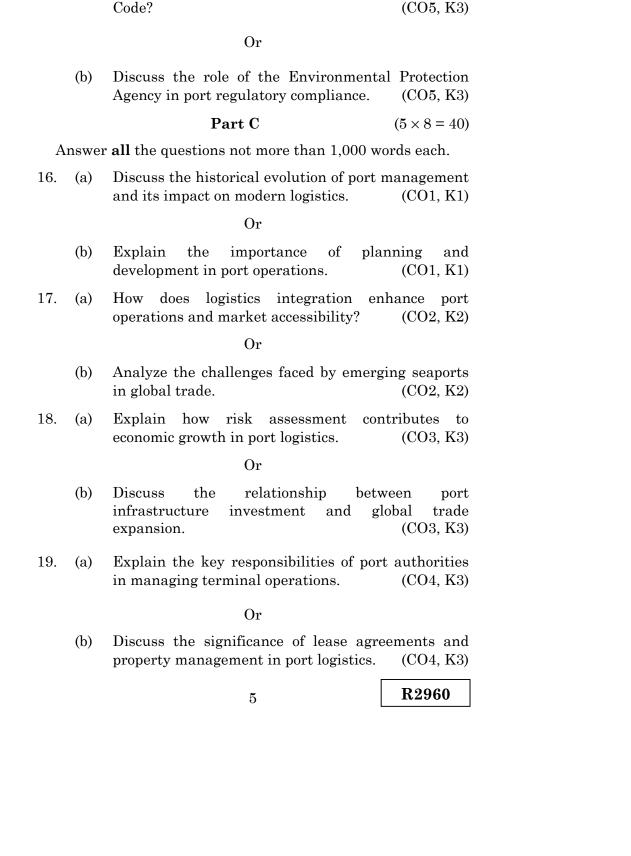
Or

- (b) How does economic growth influence port logistics and management? (CO3, K3)
- 14. (a) Discuss the role of terminal operators in port management. (CO4, K3)

Or

(b) Explain the significance of berth facilities and their impact on port operations. (CO4, K3)

4



What are the key safety regulations under the ISPS

15.

(a)

20. (a) Analyze the impact of international safety regulations on port operations. (CO5, K3)

Or

(b) Discuss the role of regulatory compliance in maintaining efficient port management. (CO5, K3)

Sub. Code 6544E2

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Fourth Semester

Logistics and Supply Chain Management

Elective - GREEN LOGISTICS

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the questions by choosing the correct option.

- 1. What is the primary focus of Green Logistics? (CO1, K1)
 - (a) Reducing transportation costs
 - (b) Minimizing environmental impact of logistics activities
 - (c) Increasing delivery speed
 - (d) Expanding global supply chains
- 2. Which of the following is NOT a component of carbon auditing? (CO1, K1)
 - (a) Measuring greenhouse gas emissions
 - (b) Evaluating supply chain emissions
 - (c) Increasing fuel taxes
 - (d) Assessing product life cycle impact

3.		ch transportation mode is considered riendly?	the most (CO2, K2)
	(a)	Air transport (b) Road transport	
	(c)	Rail transport (d) Sea transport	
4.	Reve	rse logistics is primarily concerned with	(CO2, K2)
	(a)	Transporting goods to customers	
	(b)	Returning goods and recycling materials	
	(c)	Expanding warehouse capacity	
	(d)	Reducing labor costs	
5.		t is the key benefit of optimizing vehicle ut a logistics?	ilization in (CO3, K2)
	(a)	Increased delivery time	
	(b)	Reduced transportation emissions	
	(c)	Higher fuel consumption	
	(d)	Higher operational costs	
6.	The	food miles debate is related to	(CO3, K2)
	(a)	Cost of food transportation	
	(b)	Environmental impact of food transport d	istance
	(c)	The nutritional value of transported food	
	(d)	The efficiency of food storage in warehous	es
		2	R2961

7.		ch of the following is a strategy to reduce the ronmental impact of warehousing? (CO4, K2)
	(a)	Increasing inventory stock
	(b)	Using energy-efficient lighting and insulation
	(c)	Expanding warehouse sizes
	(d)	Increasing fossil fuel-based machinery
8.	Wha logis	t is a key government policy for promoting green tics? (CO4, K2)
	()	D 1 : : 4 1 4:

- (a) Reducing import duties
- (b) Implementing emission-based taxation
- (c) Increasing logistics costs
- (d) Encouraging long-distance transportation
- 9. Which factor does NOT contribute to greener vehicles? (CO5, K2)
 - (a) Improved fuel efficiency
 - (b) Use of electric or hybrid engines
 - (c) Reducing vehicle weight
 - (d) Increasing fuel consumption
- 10. What is the role of e-logistics in Green Logistics? (CO5, K2)
 - (a) Increasing paperwork in logistics operations
 - (b) Reducing the need for physical movement of goods
 - (c) Expanding warehouse storage capacity
 - (d) Increasing fuel dependency

Part B

 $(5 \times 5 = 25)$

Answer all the questions not more than 500 words each.

11. (a) Define Green Logistics and explain its importance in modern supply chains. (CO1, K1)

Or

- (b) What are carbon audits and how do they help in achieving sustainability? (CO1, K1)
- 12. (a) Explain the benefits of transferring freight to greener transport modes. (CO2, K2)

Or

- (b) Discuss the role of reverse logistics in waste management. (CO2, K2)
- 13. (a) What are the challenges in optimizing vehicle utilization for green logistics? (CO3, K2)

Or

- (b) Describe the food miles debate and its environmental impact. (CO3, K2)
- 14. (a) How does e-logistics contribute to reducing the carbon footprint in supply chains? (CO4, K2)

Or

(b) Explain the significance of alternate fuels in sustainable logistics. (CO4, K2)

R2961

15. (a) What are the key policy measures adopted by governments for promoting Green Logistics? (CO5, K2)

Or

(b) Discuss the environmental impact of warehousing and methods to minimize it. (CO5, K2)

Part C $(5 \times 8 = 40)$

Answer all the questions not more than 1,000 words each.

16. (a) Explain the concept of Green Logistics and how it differs from traditional logistics. (CO1, K1)

Or

- (b) Discuss the major external impacts of freight transport on the environment. (CO1, K1)
- 17. (a) Analyze the benefits and challenges of using alternative fuels in logistics. (CO2, K2)

Οr

- (b) Explain how optimizing vehicle routing helps in reducing environmental impact. (CO2, K2)
- 18. (a) Discuss the importance of sustainability strategies in city logistics. (CO3, K2)

Or

- (b) How do government policies help in promoting Green Logistics? Give examples. (CO3, K2)
- 19. (a) What are the major technological advancements in greener vehicles, aircraft, and ships? (CO4, K2)

Or

(b) Discuss the impact of warehousing on the environment and strategies for sustainable warehousing. (CO4, K2)

20. (a) What is the role of carbon footprint measurement in Green Logistics? (CO5, K2)

Or

(b) Compare and contrast the advantages and disadvantages of different green transport modes. (CO5, K2)

Sub. Code 6544E3

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Fourth Semester

Logistics and Supply Chain Management

Elective: PROJECT PLANNING MANAGEMENT

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. What are the key constraints of a project? (CO1, K2)
 - (a) Time, Cost, Performance
 - (b) Profit, Loss, Market Share
 - (c) Resources, Revenue, Employees
 - (d) Innovation, Risk, Quality
- 2. What is the role of a project manager in portfolio management? (CO1, K2)
 - (a) Managing personal finances
 - (b) Overseeing multiple projects to align with business objectives
 - (c) Limiting business expansion
 - (d) Avoiding project risks

- 3. What is the primary function of stakeholder management in project planning? (CO2, K2)
 - (a) Ignoring external influences
 - (b) Engaging with individuals or groups impacted by the project
 - (c) Reducing project scope
 - (d) Avoiding project reviews
- 4. Which of the following is NOT a project success criterion? (CO2, K2)
 - (a) Timely completion
 - (b) Achieving cost and performance objectives
 - (c) Personal opinions of employees
 - (d) Meeting stakeholder expectations
- 5. What is the first step in risk management? (CO3, K3)
 - (a) Risk monitoring
 - (b) Risk evaluation
 - (c) Risk identification
 - (d) Risk resolution
- 6. Which of the following best defines "positive risk" in project planning? (CO3, K3)
 - (a) A risk that always results in project failure
 - (b) A risk that presents an opportunity for improvement
 - (c) A risk that is ignored in project planning
 - (d) A risk that increases costs with no benefit

7.	Which technique is used to analyze potential failures in a project? (CO4, K3)		
	(a)	Total Quality Management (TQM)	
	(b)	Failure Mode and Effects Analysis (FMEA)	
	(c)	Market Penetration Strategy	
	(d)	Stakeholder Mapping	
8.		t is the primary goal of a Quality Management em (QMS)? (CO4, K3)	
	(a)	Increase project risks	
	(b)	Ensure consistent quality in processes and outputs	
	(c)	Reduce stakeholder involvement	
	(d)	Avoid using audits	
9.	Wha	t is the purpose of a tender evaluation? (CO5, K3)	
	(a)	Selecting the best supplier or contractor	
	(b)	Increasing project costs	
	(c)	Ignoring procurement strategies	
	(d)	Delaying project approvals	
10.	Which document is used to invite suppliers to submit their price and service details? (CO5,K3)		
	(a)	Request for Quotation (RFQ)	
	(b)	Purchase Order (PO)	
	(c)	Risk Assessment Report	
	(d)	Project Budget Report	

3

Part B

 $(5 \times 5 = 25)$

Answer all the questions not more than 500 words each.

11. (a) Explain the key constraints of a project and their impact. (CO1, K2)

Or

- (b) What is the role of a project manager in handling sustainability and environmental aspects? (CO1, K2)
- 12. (a) Discuss the importance of stakeholder management in project planning. (CO2, K2)

Or

- (b) What are the different types of project organizational structures? (CO2, K2)
- 13. (a) Define risk assessment and explain its importance in project planning. (CO3, K3)

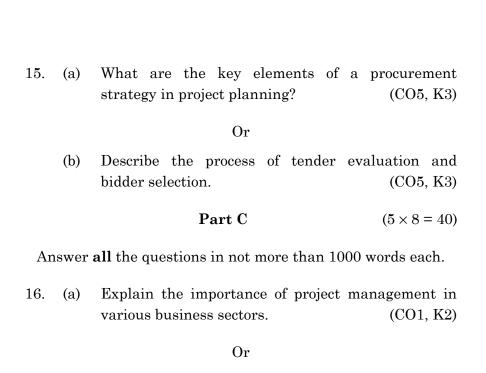
Or

- (b) What is the difference between risk mitigation and risk monitoring? (CO3, K3)
- 14. (a) How does Total Quality Management (TQM) improve project efficiency? (CO4, K3)

Or

(b) Explain the role of failure mode analysis in quality control. (CO4, K3)

R2962



- (b) Discuss the economic, social, and technical factors affecting project management. (CO1, K2)
- 17. (a) How do project life cycles influence the success of logistics business cases? (CO2, K2)

Or

- (b) Analyze the key success criteria for a project and how they impact planning. (CO2, K2)
- 18. (a) Discuss the process of risk identification, assessment, and management in project planning. (CO3, K3)

Or

(b) How can organizations turn risks into opportunities in project management? (CO3, K3)

19. (a) Explain the different approaches to quality control in project management. (CO4, K3)

Or

- (b) Discuss the importance of quality audits and assurance in project planning. (CO4, K3)
- 20. (a) Explain the procurement strategy process and its role in project success. (CO5, K3)

Or

(b) What are the different types of contracts used in project procurement? (CO5, K3)

Sub. Code 6544E4

 $(10 \times 1 = 10)$

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Fourth Semester

Logistics and Supply Chain Management

Elective: AGRO SUPPLY CHAIN MANAGEMENT

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A

Answer **all** the following objective questions by choosing the correct option.

- 1. What is the main objective of Agro Supply Chain Management? (CO1, K2)
 - (a) Reducing the cost of food production
 - (b) Efficiently managing the movement of agricultural products from farm to consumer
 - (c) Increasing food wastage
 - (d) Limiting international trade of food products
- 2. Which of the following is a key actor in a food supply chain? (CO1, K2)
 - (a) Farmers
 - (b) Processors
 - (c) Retailers
 - (d) All of the above

- 3. What is the primary challenge in food retailing? (CO2, K2)
 - (a) Increased competition
 - (b) High inventory turnover
 - (c) Storage and transportation issues
 - (d) High taxation on food products
- 4. What does APEDA stand for?

(CO2, K2)

- (a) Agricultural and Processed Export Development Authority
- (b) Agriculture Procurement and Export Development Association
- (c) Agro Product Evaluation and Distribution Authority
- (d) Association of Processed Export and Development Agencies
- 5. Which of the following is NOT a factor influencing food supply chains? (CO3, K3)
 - (a) Climate conditions
 - (b) Government policies
 - (c) Consumer preferences
 - (d) Movie industry trends
- 6. What is the purpose of traceability technology in food supply chains? (CO3, K3)
 - (a) To track the movement of food products from farm to consumer
 - (b) To increase the production of food
 - (c) To reduce supply chain costs
 - (d) To limit the number of suppliers

7.		ch of the following is a challenge in international food bly chains? (CO4, K3)
	(a)	Currency fluctuations
	(b)	Strict food safety regulations
	(c)	Transportation and logistics issues
	(d)	All of the above

- 8. What is sustainable procurement in agro supply chains? (CO4, K3)
 - (a) Purchasing the cheapest food products
 - (b) Procuring food with minimal environmental impact
 - (c) Sourcing only from international suppliers
 - (d) Eliminating suppliers from the supply chain
- 9. Which technology is widely used for food safety and traceability? (CO5, K3)
 - (a) Blockchain
 - (b) Virtual Reality
 - (c) Social Media Marketing
 - (d) Cloud Gaming
- 10. What role does food packaging play in supply chains? (CO5, K3)
 - (a) Increases product durability and shelf life
 - (b) Raises transportation costs
 - (c) Reduces food safety standards
 - (d) None of the above

Answer all the questions in not more than 500 words each.

11. (a) Define Agro Supply Chain Management and explain its significance in the food industry. (CO1, K2)

Or

- (b) What are the key actors in a food supply chain, and what roles do they play? (CO1, K2)
- 12. (a) Explain the importance of food processing in the agriculture supply chain. (CO2, K2)

Or

- (b) Discuss the challenges faced by food retailers in modern supply chains. (CO2, K2)
- 13. (a) How does temperature-controlled logistics impact food safety and quality? (CO3, K3)

Or

- (b) Explain the role of APEDA in promoting Indian agricultural exports. (CO3, K3)
- 14. (a) What are the barriers to the development of the agri-industry? (CO4, K3)

Or

- (b) How does e-commerce and online grocery retailing impact the food supply chain? (CO4, K3)
- 15. (a) Discuss the concept of strategic sourcing in food procurement. (CO5, K3)

Or

(b) How does blockchain technology help in food traceability? (CO5, K3)

R2963

Part C $(5 \times 8 = 40)$

Answer all the questions in not more than 1000 words each.

16. (a) Explain the factors influencing food supply chains and their impact on agricultural products. (CO1, K2)

Or

- (b) Discuss the importance of food safety regulations in agro supply chain management. (CO1, K2)
- 17. (a) What are the major operational challenges in food logistics and how can they be addressed? (CO2, K2)

Or

- (b) Explain how Inventory Management is handled in the agricultural supply chain. (CO2, K2)
- 18. (a) Discuss the role of ICT and future trends in agrifood logistics. (CO3, K3)

Or

- (b) How do packaging innovations contribute to the efficiency of agro supply chains? (CO3, K3)
- 19. (a) Explain the importance of sustainable procurement in the food industry. (CO4, K3)

Or

(b) How do IoT and Big Data improve the efficiency of the agro supply chain? (CO4, K3)

R2963

20. (a) Discuss the benefits and limitations of online grocery retailing in the food supply chain. (CO5, K3)

Or

(b) What are the recent developments in agrotransportation in India, and how do they impact supply chain efficiency? (CO5, K3)

Sub. Code

6544E5

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Fourth Semester

Logistics and Supply Chain Management

Elective : SUSTAINABLE SUPPLY CHAIN MANAGEMENT

(CBCS - 2022 onwards)

Time: Three Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the following objective questions by choosing the correct option.

- 1. What is the primary goal of sustainable supply chain management? (CO1, K2)
 - (a) Reducing logistics costs
 - (b) Enhancing product quality
 - (c) Minimizing environmental impact
 - (d) Increasing production speed
- 2. Which of the following trends is NOT affecting sustainability in logistics? (CO1, K2)
 - (a) Green transportation
 - (b) Increased fuel consumption
 - (c) Reverse logistics
 - (d) Carbon footprint reduction

	(a)	Profit maximization	
	(b)	Short-term growth	
	(c)	Balancing economic, social, and environmental concerns	
	(d)	Ignoring resource depletion	
4.	Whie popu	ch resource is most affected by rapid urban dation growth? (CO2, K1)	
	(a)	Gold	
	(b)	Water	
	(c)	Iron	
	(d)	Uranium	
5.	What is a major strategy to reduce the environmental impact of freight transport? (CO3, K3)		
	(a)	Using larger trucks	
	(a) (b)	Using larger trucks Increasing air transportation	
	(b)	Increasing air transportation	
6.	(b) (c) (d)	Increasing air transportation Optimizing route planning Increasing delivery frequency social dimension of sustainability in warehousing	
3.	(b)(c)(d)The	Increasing air transportation Optimizing route planning Increasing delivery frequency social dimension of sustainability in warehousing	
3.	(b) (c) (d) The include	Increasing air transportation Optimizing route planning Increasing delivery frequency social dimension of sustainability in warehousing ades: (CO3, K3)	
6.	(b) (c) (d) The inclu(a)	Increasing air transportation Optimizing route planning Increasing delivery frequency social dimension of sustainability in warehousing ades: (CO3, K3) Reducing energy consumption	
6.	(b) (c) (d) The inclu(a) (b)	Increasing air transportation Optimizing route planning Increasing delivery frequency social dimension of sustainability in warehousing ades: (CO3, K3) Reducing energy consumption Reducing workforce wages	

Which of the following is a key factor in sustainability? (CO2, K1)

3.

7.		ch of the following is NOT a principle of sustainable aging? (CO4, K3)
	(a)	Using biodegradable materials
	(b)	Reducing packaging waste
	(c)	Using excessive plastic layers
	(d)	Designing for recyclability

- 8. Green procurement primarily focuses on: (CO4, K3)
 - (a) Reducing procurement costs
 - (b) Selecting suppliers with environmentally friendly practices
 - (c) Increasing supplier competition
 - (d) Prioritizing speed cover sustainability
- 9. What is a major risk in sustainable supply chain management? (CO5, K3)
 - (a) High profitability
 - (b) Disruptions due to environmental regulations
 - (c) Increased demand for non-renewable resources
 - (d) Use of traditional logistics systems
- 10. Corporate social responsibility (CSR) in supply chains mainly focuses on (CO5, K3)
 - (a) Maximizing shareholder profits
 - (b) Enhancing employee salaries only
 - (c) Ethical sourcing and environmental responsibility
 - (d) Increasing global trade barriers

Part B

 $(5 \times 5 = 25)$

Answer all the questions in not more than 500 words each.

11. (a) Define sustainable logistics and explain its importance in supply chain management. (CO1, K2)

Or

- (b) What are the major trends affecting sustainability in supply chains today? (CO1, K2)
- 12. (a) Explain the concept of sustainability and its three main pillars. (CO2, K1)

Or

- (b) How does urban population growth impact sustainability? (CO2, K1)
- 13. (a) What are the key strategies for reducing the environmental impact of freight transport? (CO3, K3)

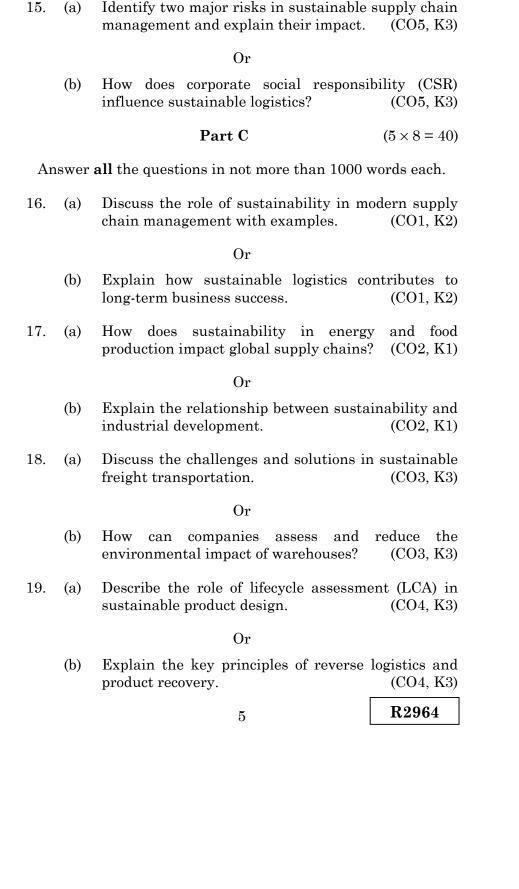
Or

- (b) How does warehouse sustainability contribute to supply chain management? (CO3, K3)
- 14. (a) Define green procurement and explain its significance in supply chains. (CO4, K3)

Or

(b) What are the major benefits of sustainable packaging in logistics? (CO4, K3)

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20. (a) What strategies can businesses adopt to manage sustainability risks in supply chains? (CO5, K3)

Or

(b) How do ethical frameworks and global initiatives influence sustainable supply chain management? (CO5, K3)

Sub. Code 6544E6

M.B.A. DEGREE EXAMINATION, APRIL - 2025

Fourth Semester

Logistics and Supply Chain Management Elective - SUPPLY CHAIN, ANALYTICS

(CBCS - 2022 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the questions by choosing the correct option.

- 1. What is the primary goal of Supply Chain Analytics? (CO1, K2)
 - (a) Reducing the number of suppliers
 - (b) Improving decision-making and efficiency in the supply chain
 - (c) Increasing the cost of supply chain operations
 - (d) Eliminating procurement processes
- 2. Which of the following is NOT a type of supply chain metric? (CO1, K2)
 - (a) Inventory Turnover
 - (b) Order Accuracy
 - (c) Customer Satisfaction
 - (d) Movie Ratings

- 3. Binary variables are used in which type of supply chain modeling? (CO2, K2)
 - (a) Capital Budgeting
 - (b) Gravity Method
 - (c) Forecasting Demand
 - (d) E-Commerce Analytics
- 4. What is the Center of Gravity Model used for? (CO2, K2)
 - (a) Finding the best location for a facility
 - (b) Measuring customer satisfaction
 - (c) Managing supplier relationships
 - (d) Predicting product demand
- 5. Which of the following methods is used for continuous location modeling? (CO3, K3)
 - (a) Binary Variables
 - (b) Set Covering
 - (c) Gravity Method
 - (d) Fixed Charge
- 6. What is the key advantage of Prescriptive Analytics in supply chain management? (CO3, K3)
 - (a) It suggests the best course of action based on data analysis
 - (b) It only focuses on past trends
 - (c) It replaces human decision-making completely
 - (d) It ignores uncertainty in decision-making

- 7. What is the primary purpose of Decision Trees in Supply Chain Analytics? (CO4, K4)
 - (a) To model different possible outcomes and their probabilities
 - (b) To track daily stock levels
 - (c) To identify customer preferences
 - (d) To minimize transportation costs
- 8. What is an example of Warehouse Location Analytics? (CO4, K4)
 - (a) Predicting customer demand
 - (b) Identifying the best place to set up a warehouse
 - (c) Managing supplier payments
 - (d) Analyzing employee performance
- 9. How does data aggregation help in network design? (CO5, K4)
 - (a) By grouping data to simplify decision-making
 - (b) By increasing the complexity of data processing
 - (c) By eliminating redundant supply chain steps
 - (d) By reducing the number of suppliers
- 10. What does Adding Outbound Transportation to the Model help with? (CO5, K4)
 - (a) Reducing the cost of delivering goods to customers
 - (b) Increasing warehouse size
 - (c) Removing suppliers from the supply chain
 - (d) Eliminating the need for inventory management

Part B

 $(5 \times 5 = 25)$

Answer all the questions not more than 500 words each.

11. (a) Define Supply Chain Analytics and explain its significance in modern supply chains. (CO1, K2)

Or

- (b) What are the key Supply Chain Metrics, and how do they relate to financial performance? (CO1, K2)
- 12. (a) Explain the role of Binary Variables in supply chain modeling. (CO2, K2)

Or

- (b) What is the Gravity Method, and how is it used in supply chain location decisions? (CO2, K2)
- 13. (a) Discuss the importance of strategic sourcing in procurement analytics. (CO3, K3)

Or

- (b) How does Decision Tree Analysis help in making supply chain decisions? (CO3, K3)
- 14. (a) What is the role of Warehouse Location Modeling in optimizing supply chains? (CO4, K4)

Or

(b) Explain the concept of Adding Capacity to the Model in supply chain network design. (CO4, K4)

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15. (a) What are the key building blocks of supply chain analytics, and why are they important? (CO5, K4)

Or

(b) Discuss the concept of Baseline and Optimal Baseline in supply chain analytics. (CO5, K4)

Part C (5 × 8 = 40)

Answer all the questions not more than 1000 words each.

16. (a) Explain the different types of supply chain models and their applications in analytics. (CO1, K2)

Or

(b) Discuss the capital budgeting and fixed charge methods in supply chain location modeling.

(CO1, K2)

17. (a) What are the major challenges in procurement and strategic sourcing, and how can analytics help?
(CO2, K2)

Or

- (b) How does prescriptive analytics support decisionmaking in supply chains with high uncertainty? (CO2, K2)
- 18. (a) Explain the importance of alternative service levels and sensitivity analysis in supply chain management. (CO3, K3)

Or

(b) What is Outbound Transportation Modeling, and how does it impact supply chain efficiency?

(CO3, K3)

19. (a) Discuss the role of Industrial Strength Analytics in improving supply chain operations. (CO4, K4)

Or

- (b) Explain how network design and data aggregation are used in supply chain optimization. (CO4, K4)
- 20. (a) What is the art of modeling in supply chain analytics, and why is it critical? (CO5, K4)

Or

(b) How do GRG Multi-Start and Evolutionary Solver Engines enhance supply chain decision-making? (CO5, K4)