Roll. No:

Time: 3 Hours   **Max. Marks: 100**

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*

*1. This Question paper comprises of **three Sections -A, B, & C.** It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.*

2. Maximum marks for each question are indicated on right -hand side of each question.

3. Illustrate your answers with neat sketches wherever necessary.

4. Assume suitable data if necessary.

5. Preferably, write the answers in sequential order.

6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

SECTION-A   20

1. Attempt all parts:-

1-a.   Indetify "digitizing" primarily involve(CO1)   1

      (a)   Creating digital processes from scratch

      (b)   Converting analog information into digital format

      (c)   Implementing new digital business models

      (d)   Developing digital marketing strategies

1-b.   Indetify the main goal of "digitalizing" in supply chains(CO1)   1

      (a)   To reduce paperwork

      (b)   To enhance digital literacy

      (c)   To transform business processes using digital technologies

      (d)   To store information in digital formats

1-c.   Select the type of virtualization involves the creation of virtual versions of operating systems(CO2)   1

      (a)   Network Virtualization

      (b)   Storage Virtualization

      (c)   Server Virtualization

      (d)   Desktop Virtualization

1-d.   Choose the correct option for hypervisor(CO2)   1

      (a)   A type of virtual machine

      (b)   Software that creates and manages virtual machines

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    (c)   A physical server

    (d)   A network protocol

1-e.   Digital signature technology in logistics is primarily used for(CO3)   1

    (a)   Scanning barcodes on packages

    (b)   Authenticating and verifying documents electronically

    (c)   Tracking the real-time location of shipments

    (d)   Enhancing wireless communication security

1-f.   A logistics company wants to implement a system that allows customers to receive   1
notifications about the status of their shipments. Which technology should they
consider using(CO3)

    (a)   Digital Signature Technology

    (b)   Geographic Information Systems (GIS)

    (c)   Advance Ship Notice (ASN)

    (d)   Bar-coding and Scanning

1-g.   Green supply chain management (gscm) Means(CO4)   1

    (a)   Managing supply chains to reduce costs.

    (b)   Integrating environmental thinking into supply chain management.

    (c)   Ensuring supply chain resilience.

    (d)   Focusing on speed and efficiency in supply chains.

1-h.   In what way does green supply chain management benefit the environment.(CO4)   1

    (a)   By focusing on rapid production cycles.

    (b)   By minimizing the environmental impact of supply chain activities.

    (c)   By prioritizing short-term economic gains.

    (d)   By reducing collaboration among supply chain partners.

1-i.   Evaluate criteria would you use to evaluate the sustainability of a transportation   1
system(CO5)

    (a)   Cost and speed of transportation

    (b)   Fuel efficiency, emissions, and use of renewable energy

    (c)   Number of vehicles and road infrastructure

    (d)   Public transportation options and convenience

1-j.   Critically assess the role of consumer behavior in the success of a circular   1
economy.(CO5)

    (a)   Consumer behavior has no impact on the circular economy.

    (b)   Consumer behavior is critical as it drives demand for sustainable products and
practices.

    (c)   Consumer behavior hinders the circular economy due to resistance to change.

    (d)   Consumer behavior only affects marketing strategies, not the economy.

2. Attempt all parts:-

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2.a.	Define business-to-business (b2b) e-business model(CO1)	2
2.b.	Define software as a service (saas)(CO2)	2
2.c.	Compare push and pull supply chain strategies.(CO3)	2
2.d.	Definition of green logistic	2
2.e.	Propose a model for integrating renewable energy sources into the reverse logistics process(CO2)	2

SECTION-B 30

3. Answer any <u>five</u> of the following:-

3-a.	Explain the primary drivers behind the shift from traditional retail to e-commerce.(CO1)	6
3-b.	How has consumer behavior changed with the advent of e-commerce?(CO1)	6
3-c.	Propose a strategy for a company to overcome the challenges of ai implementation in supply chains(CO2)	6
3-d.	Discuss at least two challenges faced when implementing ai in supply chains.(CO2)	6
3.e.	Esign a comprehensive logistics system for a large e-commerce company that integrates gps, gis, bar-coding, rfid, and digital signature technologies. Explain how these technologies will interact and the benefits they will provide.(CO3)	6
3.f.	Evaluate the challenges and benefits of integrating green purchasing strategies in a global supply chain.(CO4)	6
3.g.	Compare and contrast the environmental impacts of traditional logistics practices versus green logistics practices.(CO5)	6

SECTION-C 50

4. Answer any <u>one</u> of the following:-

4-a.	Evaluate the impact of e-commerce transformation on the retail industry. Discuss the challenges and opportunities it presents to traditional retailers.(CO1)	10
4-b.	Expalin how consumer expectations evolved with the rise of e-commerce and omnichannel strategies.(CO1)	10

5. Answer any <u>one</u> of the following:-

5-a.	List three common challenges businesses face when deploying saas solutions.(CO2)	10
5-b.	Identify potential challenges a company might face when integrating multiple saas applications and suggest strategies to overcome them.(CO2)	10

6. Answer any <u>one</u> of the following:-

6-a.	Discuss the comprehensive framework of e-procurement, highlighting its various components and technologies involved(CO3)	10
6-b.	Define what an advance ship notice (asn) is and describe its primary purpose in logistics.(CO3)	10

7. Answer any <u>one</u> of the following:-

| 7-a. | Analyze the relationship between sustainable production practices and supply chain efficiency.(CO4) | 10 |
| 7-b. | Propose a strategic plan for a manufacturing company to implement sustainable production practices that enhance both sustainability and efficiency.(CO4) | 10 |

8. Answer any <u>one</u> of the following:-

| 8-a. | Define the following terms: green logistics, reverse logistics, closed-loop supply chain, and circular economy. Discuss the significance of each in sustainable supply chain management.(CO5) | 10 |
| 8-b. | Explain how critical drivers of green logistics influence the adoption of green transportation and logistics practices in a global context.(CO5) | 10 |