

Roll No



**PRESIDENCY UNIVERSITY  
BENGALURU**

**SCHOOL OF INFORMATION SCIENCE  
END TERM EXAMINATION - JUN 2023**

**Semester :** Semester VI - 2020

**Course Code :** MEC2003

**Course Name :** Sem VI - MEC2003 - OE2 - Supply Chain Management

**Program :** BCA

**Date :** 9-JUN-2023

**Time :** 1.00PM - 4.00PM

**Max Marks :** 100

**Weightage :** 50%

**Instructions:**

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

**PART A**

**ANSWER ALL THE QUESTIONS**

**(10 X 2 = 20M)**

1. What is multimodal operation?  
(CO4) [Knowledge]
2. What are the different mode of transportation in supply chain management  
(CO4) [Knowledge]
3. What is Supply Chain Surplus?  
(CO1) [Knowledge]
4. What do understand by the term "Efficient Supply Chain"? Give a real life example (company) for the same.  
(CO1) [Knowledge]
5. Additive manufacturing technology used to produce complex products. List out two limitation of additive manufacturing technology  
(CO5) [Knowledge]
6. What are the objective of Supply chain management  
(CO2) [Knowledge]
7. What is the importance of distribution network in Supply Chains?  
(CO2) [Knowledge]
8. What is meant by causal method of forecasting?  
(CO3) [Comprehension]
9. List out the advantages of Additive manufacturing technology  
(CO5) [Knowledge]

10. Define demand forecasting in supply chain management

(CO3) [Knowledge]

## PART B

### ANSWER ALL THE QUESTIONS

(5 X 8 = 40M)

11. Implementation of recent technologies in every domain is the order of the day, likewise supply chain. Discuss any two future technologies that would be disruptive in supply chain in detail  
(CO5) [Comprehension]
12. Consider any of the service industry of your like. For the assumed case, explain various stages involved in the Supply chain with suitable schematic diagram  
(CO1) [Comprehension]
13. Consider suitable real life examples and explain the following type of distribution network designs with suitable sketches.  
(i) Manufacturer storage with direct shipping and in-transit merge  
(ii) *Manufacturer/distributor storage with customer pickup*  
(CO2) [Comprehension]
14. As per your understandings, when railways should be used for moving containers? Also elaborate Advantages and disadvantages of railways  
(CO4) [Comprehension]
15. The goal of supply chain network design is to maximize the firm's profits while satisfying customer needs. Global network design decisions are made in different phases. Explain the four phases of framework for supply chain network design  
(CO2) [Comprehension]

## PART C

### ANSWER ALL THE QUESTIONS

(4 X 10 = 40M)

16. Successful supply chain management requires many decisions relating to the flow of information, product, and funds. Explain the three decision phases in supply chain management.  
(CO1) [Application]
17. Demand for the ABC laptop is 1,600 units per month. The company incurs a fixed order placement, transportation, and receiving cost of \$3,000 each time an order is placed. Each laptop costs \$400 and the retailer has a holding cost of 15 percent. Evaluate the number of laptops that the store manager should order in each replenishment lot. Also find out total annual cost  
(CO3) [Application]
18. Assume any of the real life supply chain of your interest and explain in detail how the implementation of different advanced technologies that will help to improve the performance of the supply chain considered  
(CO5) [Application]
19. For Home appliances distributor, the demand for particular model of fridge is 2,100 units per month. Order placement, transportation, and receiving cost incurred by the distributor is \$1,000 each time when an order is placed. Each item costs them \$350 and the retailer has a holding cost of 12 percent. Evaluate the number of fridge that the store manager should order in each replenishment lot and how many orders he has to make per year. Also find out total annual cost.  
(CO3) [Application]