



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM

DEC 2023

PAPER No. 17 (enrollment code – CPS)[OFFLINE EXAM]

WAREHOUSE MANAGEMENT

Date : 19.12.2023
Time : 10.00 a.m. to 1.00 p.m

Max. Marks: 70
Duration : 3 Hrs.

Instructions:

1. Part A, contains 4 main questions (with 5 sub-questions) each question carries 1 mark - Total 20 marks
2. Part B answer any 3 questions out of 5 questions. Each question carries 10 marks - Total 30 marks
3. Part C is a case study. Read the case carefully and answer the questions - Total 20 marks

PART – A

(20X1= 20 Marks)

(Compulsory - Attempt all questions each question carries 1 mark)

Q.1 Select the right answer

[5 marks]

1. Putting away is one of the operations carried out in a _____
(a) Warehouse (b) Production floor (c) Inward goods (d) Dispatch cell
2. _____ is an important factor in the design of a warehouse
(a) Storage shelves (b) Material handling equipment (c) Throughput (d) Man power
3. Unit load formation equipment is one of the equipment used in _____
(a) Pallet trucks (b) Carousel storage system (c) Material storage (d) Material handling
4. Maximum market coverage leading to maximum sales opportunity can be achieved by using
(a) Wide sales network (b) Decentralized warehouse (c) Wide marketing (d) Big warehouses
5. Direct labour is one of the costs associated with _____
(a) Overheads (b) Transportation cost (c) Goods movement (d) Warehouse Ops

Q.2 Fill in the blanks

[5 marks]

1. _____ is the reduction in inventory due to loss or damage
2. Activity based costing (ABC) is the system of allocating _____ to each activities.
3. Time to focus on the core business activities is one of the reasons for _____
4. _____ is the system in which every employee is allocated a specific area to pick material
5. _____ warehouse is the storage location to store imported materials without duty payment

Q.3 Mention True or False

[5 marks]

1. Information flow is not part of logistics management
2. Reverse logistics refers to the flow of materials and goods from the customer to the manufacturer
3. Time-to-Market is the time taken to convert an opportunity into to a marketable product or service
4. Outsourcing is carried out by an organization when they have a shortage of manpower
5. Location of warehouse is decided based on the availability of the outsourcing partner

Q.4 Match The following**[5 marks]**

COLUMN A		COLUMN B	
Sr. No.		Sr. No.	
1	Order picking	A	Shipping to customer from warehouse
2	e-Fulfillment	B	Automated storage systems
3	Accessibility	C	Warehouse operation
4	Storage carousel	D	Warehouse safety assessment
5	Slips and Trips	E	Warehouse design consideration

PART - B**[Total 30 marks]****Answer any THREE out of the following five questions:**

- Q5.** (a) Explain the strengths and weaknesses of a centralized and decentralized warehouses **[5 marks]**
 (b) Explain the steps used to perform a risk assessment in a warehouse? **[5 marks]**
- Q6.** (a) Explain briefly the five qualitative decision factors considered in warehousing strategies **[5 marks]**
 (b) What are the important criteria that are considered in warehouse design? **[5 marks]**
- Q7.** (a) Explain the outsourcing model that has been proposed by McIvor? **[5 marks]**
 (b) What is automated picking? Explain with examples? **[5 marks]**
- Q8.** (a) What are the features of WMS? Explain its 3 broad categories. **[5 marks]**
 (b) Explain the common types of storage equipment briefly. **[5 marks]**
- Q9.** (a) What are the factors that have to be considered while choosing the location of warehouses? **[5 marks]**
 (b) What are the basic functions of a warehouse? Explain with diagram. **[5 marks]**

PART - C**[Total: 20 Marks]****Q.10****CASE STUDY (Compulsory)**

Mr. Williams is the owner of a company providing 3rd party logistics and warehousing services. He was managing the company by himself. The operations of the company have increased and he has felt the need for appointing a manager who will handle the warehouse operations.

Mr. Williams has plans to expand his operations as he has received few enquiries from prospective customers who are interested in outsourcing the warehousing operations. Mr. Williams has understood the new approach that is required to make outsourcing a success. He has appraised the new manager of the warehouses to follow the rules for successful outsourcing to bring in a win-win relationship.

Though Mr. Williams has his options of increasing his activities he has a limitation of funds. He would like to invest in the common types of storage systems. He has decided to build in versatility in these storage systems to handle light and heavy loads with the helps of the pallet trucks and other material handling equipment already available with him. He would like to add on some simple methods in the racks to make material handling easier.

Mr. Williams is aware of the need for automation to improve the efficiency of his operations. he has envisaged multiple methods that can be followed in the picking activities. He needs to study each one of them and identify the method that will best suit his needs in the later stages while automations is being introduced.

Questions:

1. Prepare a job description that will bring out the roles and responsibilities of the warehouse manager.
2. What are the new rules that have been appraised to the manager of the warehouses?
3. What common storage systems and material handling improvements are envisaged by Mr. Williams?
4. What are the automated picking systems that are under study by Mr. Williams?