

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA– SEMESTER - IV-EXAMINATION- SUMMER-2023

Subject Code: 4549271**Date: 26/06/2023****Subject Name: Materials Management****Time: 10:30 AM TO 01:30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

- Q.1** Answer the following questions: 14
- (a) Stores vocabulary
 - (b) Renard series
 - (c) Master production schedule
 - (d) Releasing orders
 - (e) Supplier selection
 - (f) Manufacturing lead time
 - (g) Material Handling
- Q.2** (a) What is meant by integrated materials management? What are the advantages of integrated materials management? 07
- (b) Into what categories are materials classified? List and discuss each category. 07
- OR**
- (b) Explain different approaches to development of specifications. 07
- Q.3** (a) Discuss the advantage of good store keeping 07
- (b) Discuss the concept of following codification system:
(1) Decimal system, (b) Brisch system 07
- OR**
- (a) What is meant by material requirement planning? Explain any two techniques of material requirement planning. 07
- (b) What is a planning file? Explain the different types of planning files. 07
- Q.4** (a) Discuss various principles of purchasing. 07
- (b) What is material handling? Explain briefly the commonly used material handling devices used in today's industry. 07
- OR**
- (a) What are the different methods of physical stock verification? Explain each method. 07
- (b) Describe the structure of bills of material in detail. 07

Q.5 CASE STUDY:

Expert Pharma Exports is an organization that manufacture Pharmaceutical Products in Bangalore and does business with USA and Europe Markets. Every day this organisation has to dispatch minimum of 7 to 8 containers and its stores team was witnessing minimum of 5 hours to 6 hours to retrieve the finished products against the packing list and further it was witnessing additional 3hours to stuff the products into the container and in total it was taking 8 hours to complete one container loading process. This was hampering the process and resulting to 50% deviation against its planned schedule. The Head Warehouse wanted to scrutinize and to set-right the process which enable the team to complete the activities within 3hours to pack the products into the container. Head warehouse formed a team of four employees to analyse the reasons as to why the stuffing process were delayed and the schedule were not adhered. The team started to analyse from the warehouse to where the products were stored. The team found that, none of the Products were stored in batch wise and none of the product were received batch wise from shop floor. Moreover there were some damages to the shippers during retrieving the products against packing list, handling the receipt of pallets from shop floor and while processing the dispatch activities. There was lack of awareness for some of the team members in stores to support the location accuracy in ERP and to store the Products batch wise in warehouse. One batch of Product were scattered in different location and the location details were not updated in ERP. There was month to month variation on Electricity cost due to frequent operation of warehouse doors. Some of the team members were submitting the allegation on management that there is short of place to accommodate all incoming products and the shop floor was not supporting to release the products batch wise. When the Head of the Warehouse learns about all the problems, he was in a state of shock and decided to bring about a required change. The first move to receive the products batch wise from shop floor and to provide the required space at shop floor to organise the product batch wise at their end. Discussed with stores team members to store the products batch wise and to update the location details in ERP and instructed them to capture the location details in Packing list and to complete all the activities pertaining to one container within 3hours. Employees were trained on how to handle the products and forklifts were allotted to manage the movement of products from shop floor and to load the products into the container. To reduce the electricity cost, instructed the team members to close the doors of the warehouse when there is no movement of materials. Instructed to adhere perpetual inventory and to prepare monthly cycle counting schedule and to monitor the location accuracy through ERP 100%. Trained Fork lift operators to handle the fork lift without any damages to the products. Finished Products were regularly monitored for any possible damages. In the following way, the Warehouse Head was able to bring about the desired result. The stuffing of one container completed within 3hours which inclusive of retrieving the products against packing list. The perpetual inventories are brought in-line with the schedule and the loss or damage of finished products was largely reduced and there was some reduction in electricity charges and apart from the above all activities the halting charges of the vehicle was also covered up.

- (a) What were various issues of stuffing the shipments into the container? 07
(b) What measures were taken to load the product into the container within 3hours and to avoid the damages to the products while transferring from shop floor? 07

OR

- (a) Why did the variation on power cost month to month and how it got reduced? 07
(b) What was done by the warehouse manager to identify the problems? 07
