



Comprehensive Concurrent Evaluation

MBA II/SEM III/312/Manufacturing Resource Planning

Faculty Name: Prof. Nilambari Moholkar

Important Instructions:

1. The subject is evaluated on the basis of three components

Group	Components	Total Marks	Date of Submission
A	Written Home Assignment	50	10th Feb 2023
B	Case Study	50	13th Feb 2023

2. Assignments to be mailed to be submitted in person.
3. Student Name, Contact number, email-id, Specialization, Component must be clearly mentioned.



Component A
Written Home Assignment

Instruction:-

Assignment is to be written on Assignment sheets

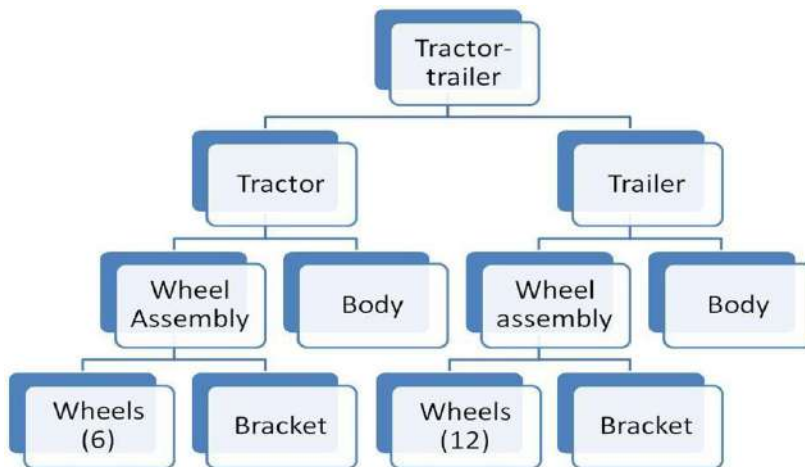
1. How would you define Master Production Schedule?
2. Justify the Statement “Link between strategic and tactical planning”.
3. Describe about time assembly schedule.
4. Define various concepts of capacity management?
5. Explain the Compatibility between MRP-II & Just-in-Time (JIT).
6. What are the benefits of channel design Profitability VS Environmental?
7. Explain about Backward & Forward scheduling.
8. Classify two components of (MRP-II)- (Module-II).
9. Outline the role of Order management in MPS.
10. What are the Problems associated with MRP-II?



**Group B
Case Study**

Promotional Novelties

Promotional Novelties provides a wide range of novelty items for its corporate customers. It has just received an order for 20,000 toy tractor-trailers that will be sold by a regional filling station company as part of a holiday promotion. The order is to be shipped at the beginning of week 8. The tree diagram shows the various components of the trucks.



The company can complete final assembly of tractor-trailers at the rate of 10,000 a week. The tractor and truck bodies are purchased; lead time is three weeks. The wheels are the manager's main concern.

The tractors and trailers both use the same wheel assembly. Assembly time is one week each for tractors trailers, and wheel assembly. However, the wheel department can only produce wheel assemblies at the rate of 100,000 a week. The manager plans to use the wheel department to full capacity, starting in week 2 of the schedule, and order additional wheels from a d ca supplier as needed. Ordered wheels come in sets of 6,400. The lead time for delivery from the supplier is expected to be two to three weeks. Tractor Trailer Wheel Body Questions Body Wheel assembly

1. How many wheels will the manager need to order?
2. When should the manager place the order? If the material is stuck due to lock down ?
3. How many wheels should the manager expect to have left over?

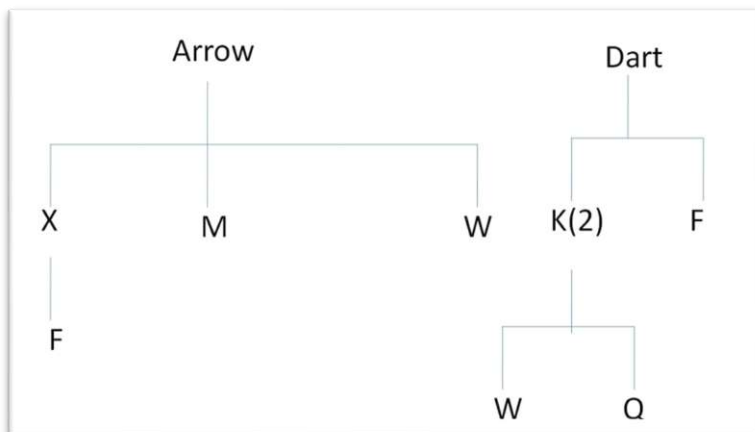


DMD Enterprises CASE

After the dot-com business he tried to start folded, David, "Marty" Dawkins decided to pursue his boyhood dream of owning a bike factory. After several false starts, he finally got the small company up and running. The company currently assembles two models Marty designed: the Arrow and the Dart. The company hasn't turned a profit yet, but Marty feels that once he resolves some of the problems he's having with inventory and scheduling, he can increase productivity and reduce costs.

At first, he ordered enough bike parts and subassemblies for four months' worth of production. Parts were stacked all over the place, seriously reducing work space and hampering movement of workers and materials. And no one knew exactly where anything was. In Marty's words, "It was a solid mess!"

He and his two partners eventually managed to work off most of the inventory. They hope to avoid similar problems in the future by using a more orderly approach.



Marty's first priority is to develop a materials requirement plan for upcoming periods He wants to assemble 15 Arrows and 10 Darts each week, for weeks 4 through The product structure trees for the two bikes tolle of Marty's partners, Ann, has organized informasn lead times, inventory an hand, and lot-sizing rules

(established by suppliers):

Item rule	Lead Time	On hand	Lot- sizing
Arrow	2	5	Lot-for-lot
Dart	2	2	Lot-for-lot
X	1	5	Q=25
W	2*	2	Multiples of 12



F	1	10	Q=30
K	1	3	Lot-for-lot
Q	1	15	Q=30
M	1	0	Lot-for-lot

*LT=3 weeks for orders of 36 or more units on this item.

Scheduled receipts are

Periods	1	20	Arrow	18 Ws
Periods	2	20	Dart	15 Fs

Develop the Material requirement plan for DMD Enterprises.

