Seat No.: ________ Enrolment No.___________

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA – SEMESTER 3 – EXAMINATION – WINTER 2018

Subject Code: 3539273 **Date: 11/12/2018**

Subject Name: Inventory Management, Material Planning and Management

Time: 10:30 AM To 05:30 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1		Briefly discuss the following: (a) Zero inventory (b) Advantages of outsourcing (c) Material Requirement Planning (d) Work in progress inventory (e) Dependent and independent demand (f) Coding in materials management (g) Objectives of materials management	**14**
Q.2	**(a)**	Discuss the similarities and differences between fixed order versus fixed inventory system.	**07**
	(b)	Inventory is important for any manufacturing company. It should be maintained properly. What are the various types of inventory required for a manufacturing company?	**07**
		OR	
	(b)	Which are the various inventory control techniques? Discuss with example.	**07**
Q.3	**(a)**	Depict your understanding for modern MRP. Also discuss MRP-II.	**07**
	(b)	It is important to prepare master production schedule to get an idea about material management in the organization. How MPS is helpful in materials management?	**07**
		OR	
Q.3	**(a)**	How distribution planning is useful in managing inventory at multiple locations for an MNC?	**07**
	(b)	What do you understand by JIT? In which industries / sectors it is advisable to go for JIT?	**07**
Q.4	**(a)**	How deterministic model is different from probabilistic model? Discuss with suitable example.	**07**
	(b)	Materials management is dependent on the organization structure. How organization structure is impacting material management?	**07**
		OR	

Q.4 **(a)** Briefly discuss EOQ model of inventory management. **07**
(b) Write a note on strategic inventory management. **07**

Q.5 Case Study **14**

A car manufacturing company decided to have their new manufacturing plant at West Bengal state of India with an intention of manufacturing the lowest cost car, making it affordable for everyone. Project execution team of the company started setting up manufacturing facilities on war footing basis and almost after 50% work was done and 60% time was consumed, due to the political and legal environment of the business, Car company had to stop the execution of the project.

After losing few more weeks as a part of conflict resolution mechanism, both the government officials and company authorities came to the conclusion that project will not be able to take shape at this state and will not get executed further on that land.

After loosing sizable time and resources, company decided to shift the manufacturing facility to another state (Gujarat). After doing so, the major challenge company's board of director were facing that of having production started on planned date as it was earlier and to do so, how to expedite project of setting up manufacturing process.

The other major challenge was, as sizable resources (capital mainly) were lost the process, Producing the car at the lowest cost was another major challenge they were facing.

Third and important challenge for the company officials was to maintain the consistency in quality – in spite of expediting manufacturing plant execution process and dropping the cost at every stage. It is not easy for the top management to take decision.

Based on this information answer the following questions:

a) How materials management is helpful in addressing the problem of execution of the plant at new site?
b) Due to the new location, how the company will manage the customers and suppliers of raw materials?

OR

a) How inventory management is helpful in dropping the cost?
b) If you are appointed as an inventory manager, which techniques of inventory management will you adopt and why? Justify your answer.

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