



GL BAJAJ

Institute of Management & Research
Approved by A.I.C.T.E., Ministry of HRD, Govt. of India

Roll No.....

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) – 201306

POST GRADUATE DIPLOMA IN MANAGEMENT (2018 -20) MID TERM EXAMINATIONS (TERM - V)

Subject Name: **Materials and Purchase Management**
Sub. Code: **PGO-01**

Time: **01.30 hrs**
Max Marks: **20**

Note:

1. Writing anything except Roll Number on question paper will be deemed as an act of indulging in unfair means and action shall be taken as per rules.
2. All questions are compulsory in Section A, B & C. Section A carries 1 Case Study of 8 marks. Section B carries 3 questions of 2 marks each and Section C carries 2 questions of 3 marks each.

SECTION - A

04+04 = 08 Marks

Q. 1: Case Study:

Indian Industries has got tremendous power to stand before the global market. Due to some strong reasons they fail to prove their potential. Just in Time (JIT) technique is one of the Japanese production strategy that improves the productivity by reducing the in process inventory. JIT means that in a flow process, the right parts needed in assembly reach the assembly line at the time they are needed and the amount needed. The JIT approach started to be developed at Toyota by Taiichi Ohno, its vice president of manufacturing, and several of his colleagues since 1940s. At that time it was called the Toyota Production System (TPS). Just-In-Time was widely applied in Japan during the 1970's in the automotive and electronics industries. JIT may be described as an extension of the original concept of managing the material flow in industries to reduce the inventory levels at each stage. It is a demand driven approach, which encourages flow type production. It is also described as a drive to simplify the manufacturing system in order to quickly detects the problems and force immediate solutions. It is now well recognized that JIT is not just a collection of techniques but really a philosophy. The central idea behind the JIT philosophy is to expose the hidden problems and involve all employees, to remove them, so that the necessity of higher stocks does not arise. The techniques and systems used by various companies under waste elimination techniques of JIT are as follows:

- Batch size reduction.
- Group technology layout.
- Scientific machine and factory design.
- Mixed model of production.
- Kanban applications.

- Balanced scheduling.
- Set-up time reduction.
- Flexible and multi-functional workforce.

JIT manufacturing results in lower total system costs and improved product quality. With JIT, some plants have reduced inventory more than fifty-percent and lead time more than eighty-percent. JIT is lowering costs and inventory, reducing waste, and raising the quality of products. Companies that implement JIT are able to reduce inventory level and approach zero inventory conditions. JIT practices can help the Indian industries to become more competitive by enhancing their export in world market. But, it is observed that social, cultural and political matters have a significant impact on JIT practices in different parts of world. Revolution in industrial engineering always made changes in the production system. JIT leads to significantly higher quality and productivity and provides visibility for results so that worker's responsibility and commitment are improved.

- Why Indian industries fail to Implement JIT? Discuss in brief.
- Analyze the case and discuss the benefits of JIT to implement in the organization.

SECTION - B

02×03 = 06 Marks

- Q. 2:** Describe the problems that might come from using an incorrect bill of material in MRP.
- Q. 3:** How is 'lean manufacturing' a step ahead of JIT production system? Explain.
- Q. 4:** What is the relationship between the MPS and the MRP?

SECTION - C

03×02 = 06 Marks

- Q. 5.** What are the types of materials that are being purchased by your organization? Do they fall under different classes?
- Q. 6.** Explain the difference in 'lean' and 'traditional' thinking. Is there a difference in the purposes? If so, what is it?