

Roll No.

Total No. of Pages : 03

Total No. of Questions : 09

MBA (Executive) (Sem.-4)

LEAN MANAGEMENT

Subject Code : MBX-903

M.Code : 74414

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** contains **TEN** questions carrying **TWO** marks each and students has to attempt any **EIGHT** questions.
2. **SECTION-B** consists of **SEVEN** questions each carrying **SEVEN** marks each and student has to attempt any **FIVE** questions.
3. **SECTION-C** is consist of **ONE** Case Study carrying **NINE** marks.

SECTION-A

1. Answer briefly :

- a) Discuss the significance of TPS House diagram.
- b) Briefly explain how can the 7 wastes be minimized.
- c) Discuss the significance of visual management.
- d) Differentiate between continuous flow and pull systems.
- e) Discuss the concept of Value stream mapping.
- f) Describe the significance of SMED.
- g) Differentiate between downtime losses and defect losses.
- h) Discuss the role of bottom management in leading the implementation of lean management.
- i) Describe the various pillars of TPM.
- j) Explain the concept of HEIJUNKA.

SECTION-B

2. Discuss the various lean tools.
3. Briefly differentiate between MUDA, MURI and MURA.
4. Explain the points to be kept in mind for the successful implementation of 5S system.
5. Discuss the various rules of KANBAN system execution.
6. Discuss the significance of Manufacturing cells.
7. Explain the benefits of Kaizen in a manufacturing industry.
8. Discuss the strategy for implementing lean manufacturing.

SECTION-C

9. Case Study :

Kanban is enormously prominent among today's agile software teams, but the Kanban methodology of work dates back more than 50 years. In the late 1940s Toyota began optimizing its engineering processes based on the same model that supermarkets were using to stock their shelves. Supermarkets today stock just enough products to meet consumer demand, a practice that optimizes the flow between the supermarket and the consumer. Because inventory levels match consumption patterns, the supermarket gains significant efficiency in inventory management by decreasing the amount of excess stock it must hold at any given time. Meanwhile, the supermarket can still ensure that the given product a consumer needs is always in stock.

When Toyota applied this same system to its factory floors, the goal was to better align their massive inventory levels with the actual consumption of materials. To communicate capacity levels in real-time on the factory floor (and to suppliers), workers would pass a card, or "Kanban", between teams. When a bin of materials being used on the production line was emptied, a Kanban was passed to the warehouse describing what material was needed, the exact amount of this material, and so on. The warehouse would have a new bin of this material waiting, which they would then send to the factory floor, and in turn send their own Kanban to the supplier. The supplier would also have a bin of this particular material waiting, which it would ship to the warehouse. While the signaling technology of

this process has evolved since the 1940s, this same “just in time” (or JIT) manufacturing process is still at the heart of it.

Agile software development teams today are able to leverage these same JIT principles by matching the amount of work in progress (WIP) to the team’s capacity. This gives teams more flexible planning options, faster output, clearer focus, and transparency throughout the development cycle

- a) Explain the utilization of Kanban to supermarkets functioning.
- b) Can Kanban be differentiated from JIT technique? Why?
- c) Describe how Kanban can be applied to software teams.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.