

**GUJARAT TECHNOLOGICAL UNIVERSITY****MBA(IB) - SEMESTER- II EXAMINATION – WINTER 2019****Subject Code: 1529303****Date: 27-12-2019****Subject Name: Global Operations Management****Time: 2.30 PM to 5.30 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** Explain the following terms: **14**
- |                            |               |
|----------------------------|---------------|
| (a) MRP                    | (b) PERT      |
| (c) Horizontal Integration | (d) JIT       |
| (e) Taguchi Concept        | (f) Six Sigma |

- Q.2** (a) Explain Importance of Operations Management with due focus on ten key decisions to be taken by Operations Manager. **07**
- (b) Project control should always focus on the critical path” Critically examine the statement. **07**

**OR**

- (b)**

Activity	Time (Days)	Predecessor
A	1	-
B	4	A
C	3	A
D	7	A
E	6	B
F	2	C,D
G	7	E,F
H	9	D
H	4	G,H

**07**

Draw the critical path Diagram.

Show the early start and early finish and late start and late finish time.

Show the Critical Path.

- Q.3** (a) Plant Location has critical contribution in effective production target achievement. Discuss this statement considering factors affecting location decisions. **07**
- (b) List out and explain various types of Plant Layouts with suitable examples. **07**

**OR**

- Q.3** (a) Explain Capacity Planning and various measures to evaluate Capacity Planning. **07**
- (b) Discuss the concept of mass customization which combines the flexibility of a process focus with the efficiency of product focus. **07**
- Q.4** (a) TQM Emphasis on Quality that encompasses the entire organization from supplier to customer. Discuss various concepts for an effective TQM. **07**
- (b) Aggregate Planning is usually to meet forecast demand while minimizing cost over the planning period. Discuss various Aggregate Planning option's advantages and disadvantages. **07**

OR

- Q.4 (a) Write a note on Kanban. 07  
(b) JIT enables to achieve competitive advantage. Write a detailed note on same. 07
- Q.5 (a) **CASE STUDY:**

Harley-Davidson, Inc. is the fifth biggest player in the global motorcycle market. Established in 1903, the company is known for manufacturing heavyweight motorcycles. For example, the company focused on motorcycle enthusiasts, especially those who are interested in the chopper biking culture. However, as its mission statement now indicates, Harley-Davidson now offers more products. The mission statement shows the company's aims and approaches to develop its business. Also, Harley-Davidson's vision statement emphasizes leadership in stakeholder management. Harley-Davidson's vision statement is as follows: "Harley-Davidson, Inc. is an action-oriented, international company, a leader in its commitment to continuously improve our mutually beneficial relationships with stakeholders (customers, suppliers, employees, shareholders, government, and society). Harley-Davidson believes the key to success is to *balance stakeholders' interests through the empowerment of all employees to focus on value-added activities.*"

Harley-Davidson's operations management (OM) ensures that the company maintains effective and efficient business activities to support resilience and competitiveness. Harley-Davidson's managers must determine the best options for the 10 strategic decision areas of operations management. These 10 decisions cover the key business areas that involve suitable operations management approaches. To optimize the productivity of its facilities, Harley-Davidson continues to develop its operations management practices to suit evolving business needs. For instance, motorcycle designs are regularly tested to determine satisfaction of customers' expectations and regulatory requirements.

Harley-Davidson motorcycles are known for their unique and handcrafted designs. In this strategic decision area of operations management, the company's objective is to support its brand image based on available resources. This brand image emphasizes Harley-Davidson motorcycles' quality and high-end chopper design. The company aims to maximize output quality that matches the Harley-Davidson brand image and customers' expectations. The company has strict requirements for suppliers to ensure high quality motorcycles. The strategic decision always involves high quality and new technologies. Optimal production process is an objective in this decision area.

At Harley-Davidson, operations managers automate processes for maximum efficiency in producing motorcycles and related products. Also, the company's production facilities address demand and cost considerations in the global market. Most of Harley-Davidson's authorized dealers are located in town and city centres. Many of these dealers are involved in deciding the location of the dealerships. Thus, Harley-Davidson's operations management addresses this strategic decision area through partially decentralized decision-making for dealership locations. In addition, the locations of the company's warehouses are based on the locations of authorized dealers to optimize the transportation efficiency of Harley-Davidson motorcycles and related products.

For company-owned facilities like motorcycle production buildings, Harley-Davidson's operations management approach for this decision area involves traditional models adjusted to suit the facility's purpose. Also, a standardized set of layout design requirements are implemented for authorized Harley-Davidson dealerships. Harley-Davidson maintains a Supplier Diversity policy and ensures optimal productivity and capacity of its supply chain based on the availability of a wide variety of suppliers. Operations managers focus on inventory adequacy and timeliness. Harley-Davidson addresses these concerns through automated inventory monitoring in company-owned facilities. The company also has an online system for orders and requests involving authorized dealers. Harley-Davidson has streamlined schedules for its business activities. Harley-Davidson addresses such concern through automated schedules for the supply chain and orders involving authorized H-D motorcycle dealers. Traditional operations management approaches are also used for scheduling employees' activities at Harley-Davidson's offices. Harley-Davidson's motorcycle production processes are standardized with redundancy measures. For example, the company coordinates the activities of production facilities, which minimize stock-outs by supporting each other during demand peaks. Harley-Davidson also has maintenance teams for buildings and equipment.

- (a) What are the 10 strategic decisions in Operations Management? Briefly explain each. **07**
- (b) Discuss how Harley Davidson addresses decision related to Design of goods and services. **07**

**OR**

- Q.5**
- (a) Evaluate Layout related decisions by Harley Davidson. **07**
  - (b) Discuss presence of Harley Davidson in India and location related strategy. **07**

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