

**OM09/eOM09**  
**OPERATIONS STRATEGY**

**Time: Three Hours**

**Maximum Marks: 100**

**Note:**

The paper is divided in three sections: SECTION-A, SECTION-B and SECTION-C. There are seven questions in SECTION-A. Students are required to attempt ANY FOUR. SECTION-B has 5 questions, attempt ANY THREE. All the questions of SECTION-C (Case Study) are compulsory.

**Section A (10 marks each)**

1. What do you understand by the term 'Production & Operations Management'? (10)
2. What are the major operations management issues that manufacturing organizations face in India? (10)
3. Write short notes on **any two** of the following : (5+5)
  - (i) Just-In-Time Inventory Management.
  - (ii) Computer Aided Design.
  - (iii) Computer Aided Manufacturing
4. How does an operations manager use the advantage of quality management strategy in making business decisions? (10)
5. Explain with examples product design process and service design process. (10)
6. What do you think about the term 'Product Quality Control' and 'Product Quality Assurance'? (10)
7. What are the operations strategies that managers need to make effective process? (10)

**Section B (15 marks each)**

8. What is a product life cycle (PLC)? Explain each phases with an example of automobile sector in India and its implications for operations strategy. (5+10)

9. Manufacturer is always under the dilemma in producing customized products. Why? (15)
10. Write short notes on (15)
- (i) Environmental & Ethics Forces
  - (ii) ERP Applications
  - (iii) Continuous Process Improvement
11. Differentiate between the followings- (15)
- (i) Re-Engineering V/s Benchmarking
  - (ii) Process Invention V/s Process Innovation
  - (iii) Quality Management V/s Quality Assurance
12. What is Capacity Planning? Differentiate with Aggregate Planning? Explain both with an example. (5+5+5)

**Section – C (15 marks each)**

13. **Case Study (Compulsory)**

This case study is about quality management at Toyota Motor Corporation (Toyota), the world's leading automaker. Over the years, the Japanese automaker had built up a reputation for manufacturing reliable cars and trucks. Toyota's products were a byword for quality for customers so much so that its manufacturing techniques were followed by its competitor's world over. Toyota's commitment to manufacturing world class and quality automobiles was entrenched in its entire manufacturing philosophy right through the development stages to manufacturing. At Toyota, quality was in built into each manufacturing process and employees from all divisions ensured that defective items did not pass on to the next process.

At the core of the company's success was the Toyota Production System (TPS), which made use of concepts like genchi genbutsu, Just-in-Time (JIT), Kaizen, Kanban, and Jidoka to reach a high level of efficiency in production. Toyota recognized quality as one of the most important factors affecting customer satisfaction and strove to achieve excellence in manufacturing quality products.

To ensure zero defects in the finished product, Toyota set up quality assurance systems across various divisions, including development, purchasing, and production. To overcome quality assurance problems caused due to rapid globalization, Toyota adopted the "Toyota Way" - a set of management principles and communicated them to all its overseas manufacturing plants. Due to its efficiency in manufacturing, Toyota became one of the most trusted brands in the global automobile industry. But some analysts felt that Toyota had become a victim of its own success. In the mid-2000s Toyota expanded its production facilities rapidly in a bid to grow globally and to achieve its goal of becoming the number one auto maker in the world. Toyota's rapid growth affected its product quality with the company reportedly compromising on its manufacturing techniques. Customers began to face safety

related problems in Toyota vehicles. Later a series of recalls followed which put the company's hard-earned reputation for quality at risk. Analysts opined that constant recalls had damaged the reputation and brand image of Toyota and hindered its return to profitability. In a quest for market share, Toyota had sacrificed its legendary quality and ignored its own management principles and customers, they said. To verify the cause of recalls and improve quality, Toyota set up a committee headed by its president Akio Toyoda in early 2010. The committee was to inspect every process in the Toyota Production System to ensure delivery of quality products to customers.

### Questions

- 13 (1) Explain Toyota Production System. (5)  
(2) Why Toyota become victim of its own success? (5)  
(3) What you understand the word 'Toyota Way'? (5)