



**INDIAN INSTITUTE OF MATERIALS MANAGEMENT**  
**Post Graduate Diploma in Materials Management**  
**Graduate Diploma in Materials Management**  
**PAPER No. 8**  
**Operations Management**

**Dec 2013**

**Date: 17.12.2013**

**Max. Marks: 100**

**Time: 10.00 a.m. to 1.00 p.m.**

**Duration: 3 Hrs.**

**Instructions:**

1. From Part A – answer all questions (compulsory). Each sub questions carries 1 mark. **Total: 32 Marks**
  2. From Part B – Answer any 3 questions out of 5 questions. Each sub-question carries 16 marks. **Total : 48 Marks**
  3. Part C is a case study (compulsory) with questions. Read the case study carefully and answer the questions. **Total: 20 Marks**
  4. Please read the instructions given in the answer sheet.
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**Part – A**

**32 Marks**

**(attempt all questions Each sub questions carries 1 mark)**

**Q.1 Indicate the correct answer from amongst the choices viz. (a), (b), (c) or (d).**

- 1.1. Example of Operation Strategy:  
(a) Decreasing cycle time from 2.5 min. to 1.75 min. (b) Reduce inventory level from 6 days to 2 days. (c) All of the above. (d) None of the above
- 1.2. Forecasting refers to:  
(a) Prediction based on past data (b) Experts opinion on future events  
(c) Analysis of factors influencing future events (c) All of the above
- 1.3. Process Design refers to:  
(a) Types of products to produce (b) Equipments available & needed  
(c) Individual manufacturing operations (d) None of the above
- 1.4. Information needed for Production Planning:  
(a) Customer product pricing (b) Absenteeism of workers  
(c) Resource availability (d) All of the above
- 1.5. Shop floor Planning & Control is influenced by process flows:  
(a) Job Shop Process (b) Batch Technology  
(c) Assembly line (d) All of the above

- 1.6. Job design means:  
 (a) What and how tasks are done (b) Employees qualifications  
 (c) Experience gained (d) none of the above
- 1.7. Term used in SQC Technique:  
 (a) Variables (b) Attributes  
 (c) Assignable cause of variation (d) none of the above
- 1.8. JIT Manufacturing will help in:  
 (a) Reduce & eliminate set-up time (b) Reduce lot sizes  
 (c) Improved Quality levels (d) All of the above

**Q.2 State whether the following statements are True or False.**

- 2.1 All strategies are formulated at the Corporate Level
- 2.2 Demand Forecasting can be done only if past data is available.
- 2.3 Process Planning consists; 1) Process Design and 2) Operations design
- 2.4 Industrial sanitation is a specialized application of community environment and health services
- 2.5 The major output of an MRP system is Bill of Materials (BOM)
- 2.6 Make or Buy decision is influenced by technology, Cost, Logistics and Support Systems.
- 2.7 Kanban is a pull system controlled by card & empty containers
- 2.8 Statistical Process Control automatically leads to Zero Defect Production.

**Q.3 Fill in the blanks:**

- 3.1 "Exponential Smoothing" is a technique used in .....
- 3.2 In the Maturity Stage of Product Life Cycle demand of product is .....
- 3.3 Mechanization replaces the .....power.
- 3.4 Noise Control can be at it's ..... in its transmission or at the receiver's end.
- 3.5 Material handling should consider ease of operation, user friendliness and .....of personnel
- 3.6 MRP1 will work well, only when BOM and Stock figures are .....
- 3.7 Job design involves task/machine pacing, job enlargement and job .....
- 3.8 JIT Manufacturing is based on the principle of Waste .....

**Q.4 Expand the following:**

- 4.1 MRP
- 4.2 TQM
- 4.3 LOB
- 4.4 CAD/CAM
- 4.5 FIFO
- 4.6 PLC
- 4.7 STR
- 4.8 RSI

**Part – B**

**48 marks**

**(Answer any three questions from the following , each question carries 16 marks)**

- Q.5** (A) Elaborate on the statement “Strategies are formulated at three levels in an organization”.
- (B) Indicate some of the Long Range Decisions that are addressed in key strategic formulations. .
- Q 6** (A) What are the Principles of Layout?
- (B) Describe various types of layout.
- Q7** (A) What is Manufacturing Resource Planning?
- (B) What are the benefits of MRP II System application?
- Q8** (A) What is meant by Statistical Quality Control?
- (B) What is the importance of Quality Circles & Kaizen Teams?
- Q9 Write Short Notes on any four:**
- (A) Mechanization & Automation.
  - (B) Importance of lighting in the shop floor.
  - (C) Materials Requirement Planning
  - (D) Objectives of Job Design
  - (E) Meaning & importance of productivity.
  - (F) 7 Wastes in the Manufacturing System

**Q 10. CASE STUDY (Compulsory)****FASHION GARMENTS**

Amit Dasani went to work for his father Deepak Dasani who was the owner of the company which was a chain of apparel stores. The company was founded by his grandfather over 50 years ago. With his father's drive and knowledge of fashion and how to buy and sell them, the company has grown from a single store in Mumbai to a fairly large and highly profitable chain of thirty stores in India.

Amit Dasani prided himself on being able to keep his hands on details in buying, advertising and stores management. He met all his stores managers once in 15 days to discuss on how to grow the business in the present competing market. He was not happy and a bit worried that the business has reached a stage of stagnation. His father advised him not to lose heart since they have a very dedicated team of people who will always put in their best of efforts if they clearly understand the route that is being taken by the top management. He also said that they will come out readily with many workable solutions to improve the operations.

Deepak Dasani said that the time has come to spell out very clearly the organizational objectives. We must work on 15% annual growth and maintain the Return on Investment at 20%. There is a need for adding more product varieties meeting the demands of various market segments. Focus will be on product quality and timely delivery. We can now look upon even export market for variety of products since we have a very good reputation in the Indian Market.

It is time now to look upon regional heads to address the specific needs of their region. They can come up with their own Business Unit level strategies on products, advertisements, promotions, resource requirements for expansion of business, pricing policies and customer service.

They can also present Operational Level Strategies relating to Demand Forecasting, Order Planning & Procurement, Inventory Holding, Quality Management, Stores Rental, Manpower needs and Liquidity Management.

**Questions:**

- A. At present what are the major concerns of the company?
- B. What are the major Objectives of the company? What do you see as the Corporate Level Strategies?
- C. By establishing Regional Heads, with many stores under them, what are the Business Level Strategies that could be drawn up?
- D. What are the various Operational Strategies that they must address?
- E. What benefits will be achieved by developing strategies at various levels?

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