# **Indian Institute of Materials Management**

**Post-Graduate Diploma in Materials Management** 

# PAPER-8 Operation Management

DATE: 15.12.2009 MAX. MARKS: 100 Time: 10.00am to 1.00pm Duration: 03 hrs.

### **INSTRUCTIONS:**

1. From Part 'A', answer four questions (Compulsory). Each sub-question carries 01 mark.

**Total: 32 Marks** 

2. From 'B', answer any 3 out of 5 questions. Each question carries 16 marks.

Total Marks: 48

3. Part 'C', is a case study with sub questions (Compulsory)

**Total Marks: 20** 

- 4. Use of calculator and/or mathematical table is permitted. Graph sheet can be used wherever necessary.
- 5. Please read the instruction on the answer sheet.

## Part -A

### Q.1. State true or false.

Marks: 08

- a) After a product is designed and developed, it goes through various stages in its life cycle.
- b) Forecasting involves the projection of the future into the past.
- c) As the product finds market acceptance, it goes into the growth stage..
- d) Incentive schemes serve the purpose of motivating employer to perform better.
- e) TQM is systematic problem solving for continuous improvement.
- f) One of the must important functions of a manager is to take decision.
- g) JIT is used in business manufacturing process to reduce the cost.
- h) Production function is not primary function of an enterprise.

### Q. 2 Fill in the blank.

Marks: 08

- 2.1 ----- design is concerned with the design of manufacturing operation. .
- 2.2 The major problem in flow shop production control is to attend the desired ----- rate with maximum possible efficiency.
- 2.3 JIT is a Japanese management philosophy adopted in early ----- in many manufacturing organization.
- 2.4 Effective ----- management ensures right materials, in right quantities, at right price at place.
- 2.5 An important part of -----planning is master production scheduling.
- 2.6 The make or----- question represent a fundamental dilemma faced by many companies.
- 2.7 EBQ stands for Economic Batch -----
- 2.8 ----- is systematic problem solving for continuous improvement.

## Q. 3. Link & Connect the following correctly.

| 3.1 FMS              | Automated PPC                |
|----------------------|------------------------------|
| 3.2 CAM              | Automatic material handling. |
| 3.3 SQC              | Progress of various phases   |
| 3.4 LOB              | Controlling Quality          |
| 3.5 CADD             | Right produced, first time.  |
| 3.6 Break-even Chart | Elimination of waste         |
| 3.7 JIT              | Appraisal System             |
| 3.8 PDCA             | Profit loss analysis         |

# Q4. Expand Following:

Marks: 08

Marks: 08

- 4.1 MRP
- 4.2 ERP
- 4.3 SQC
- 4.4 JIT
- 4.5 TQM
- 4.6 AOQ
- **4.7 HRM**
- 4.8 PLM

# **PART-B**

### Answer any three from following.

Q.5 a) Name the element of operation strategies.

Marks: 08

b) What is fore casting? Why is it necessary in Production Function?

Marks: 08

Q.6. a) How manufacturing Process are classified?

Marks: 08

b) What are different methods of metal cutting?

Marks: 08

Q.7. a)Describe the objective of plant layout.

Marks: 08

b) Explain Production Planning & Control.

Marks: 08

Q. 8. a) Describe the purchasing cycle in details.

Marks: 08

b) What is the statistical quality control?

Marks: 08

Q.9. a) What do you understand Kanban Cards?

Marks: 08

b) Explain and discuss the modern approach to preventive maintenance. Marks: 08

#### **PART-C**

### **Sunshine Clearing Systems**

As one of the largest contract cleaning companies in the state of Florida, Sunshine Clearing systems, Inc., has more than 1,000 employees and annual revenues exceeding \$10 million. The company specializes in pressure cleaning, janitorial service, and window cleaning. The company's success is evident by the long list of clients it serves, including the Miami Dolphins training center, the Orlando arena (home of the Orlando Magic), the Florida Turnpike Authority, the Florida Cirrus Bowl, the fort Lauderdale Airport, and numerous banks, restaurants, and convention centers. The company is expanding beyond the state of Florida and has landed a window cleaning contract for all 11 museums of the Smithsonian Institution in Washington, D.C.

The success of Sunshine Cleaning can, in large measure, be traced to the leadership of the company's CEO. Larry Calufetti. A former major league baseball player, Calufetti applies many of the principals he learned during his days as a player to his "coaching" style of leadership. Under his direction, all the managers of this privately held corporation have to use the coaching leadership style. Calufetti is convinced that this approach is the key to motivating and leading employees to accomplish the company's goals.

Seven major principles comprise sunshine's coaching leadership style. First leading by example, sunshine management supports and respects all its employees and believes, further that all of them should treat others as they want to be treated. Second, management believes that, just like their counterparts in baseball, managers need to train and teach employees how to do their tasks correctly. Third, management supplies employees with all the necessary tools and supplies the need to do their jobs well. Fourth, employee's need to feel responsible for their jobs and take pride in doing good work – and, in the process, develop a special esprit de corps that translates into better performance.

Fifth, management encourages innovation from its employees by openly soliciting new ideas from them. Sixth, it utilizes various rewards, both financial and informal, to build loyalty to the organization and sustain its family atmosphere. Finally, the company develops its employees (as a baseball coach would), helping them find their niches and maximizing their effectiveness. As part of this development program, the company promotes from within so that employees view their work as a career opportunity, not just another job.

With the company's growth and significantly lower than average turnover rate (in an industry with a history of high turnover), the coaching leadership style at Sunshine Clearing Systems is an apparent big league hit.

# **Questions:**

- 1. How dose coaching differ from managing? Marks: 06
- 2. Why does Sunshine's management stress the cross-training of employees? Marks:07
- 3. For what practical reasons does sunshine's management emphasize responsibility and innovation and reward employees for exhibiting these traits?

  Marks:07