



INDIAN INSTITUTE OF MATERIALS MANAGEMENT  
Post Graduate Diploma in Materials Management

Graduate Diploma in Materials Management

PAPER No. 8(OLD)

Operations Management

June 2015

Date: 16.06.2015

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

Max. Marks: 100

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 State true or false :**

**8 marks**

- a) ABC is a useful management tool to channelise continuous improvement efforts in an organization.
- b) Logistics is proved to be part of Supply Chain Management
- c) DBR is a planning and scheduling solution derived from ToC.
- d) Vendor Performance Evaluation is not mandatory for Purchase functions
- e) Forecasts are estimates of timing and magnitude of the occurrence of past events.
- f) TPM methodology deals with improving breakdown time
- g) Location problem in case of multiple plants and multiple demands points can be solved using standard transportation model
- h) MRP in the short run confirms to making effective use of available capacity.

**Q : 2 Fill in the blanks with the correct answer**

**8 Marks**

- a) BOM stands for \_\_\_\_\_
- b) There are generally \_\_\_\_\_ phases for project management.
- c) KANBAN is a control tool for \_\_\_\_\_
- d) \_\_\_\_\_ sets the quantity of each end item to be completed in each week.
- e) Condition Monitoring is part of \_\_\_\_\_ maintenance.
- f) MRP-II stands for \_\_\_\_\_
- g) \_\_\_\_\_ is an arrangement by which some of the business processes are done by third party on behalf of an organization.
- h) MTBF stands for \_\_\_\_\_.

**Q : 3 – Match the following**

**8 marks**

	Column "A"		Column "B"
1	Planning	A	Tracking Signal
2	JIT	B	Accuracy of forecast
3	ABC	C	Environment aspects
4	GPS	D	Sustainable development
5	TQM	E	Zero Defect
6	ISO : 14000	F	Quality aspects
7	ISO : 9000	G	Annual usage value
8	ISO : 2600	H	Zero inventory concept

Q: 4 Expand the following terms:

**8 marks**

1. PERT                      2.CPM                      3. TPM                      4.MPS  
5. ERP                      6. BPR                      7.DRP                      8.MRP

**Part – B**

**48 marks**

**(Answer any 3 questions out of 5 questions. Each sub-question carries 16 marks.)**

**Q : 5 (a)Define** Operations Management and explain the current issues in it.

**(b)Explain** the process of Product and Process Layout.

**Q : 6 Write short notes on following (any four)**

- (i) Learning Curves
- ii) Total Productivity
- iii) Bill of Materials
- iv) Statistical Quality Control
- v) Equipment Life Cycle
- vi) Selective Inventory Control Techniques
- vii) JIT

**Q : 7 (a)** Briefly sketch the product development process?

**(b)** How can the effectiveness of product development process be measured?

**Q : 8 (a)** Why Scheduling is important ? Discuss.

**(b) What is the** difference between forecasting and prediction?

**Q : 9 (a)** What does the term operation strategy mean? How is it different from corporate strategy?

**(b)** How can the internet affect the practice of operations management?  
Does it have any implications for operation strategy?

### **Part – C**

**Q. 10** Case study

**20 marks**

Most of the MNCs are operating globally and their supply chains are also truly global. Procurement takes place in one place, manufacturing in some countries, assembly in other countries and marketing in most of the countries. Most companies outsource production to low wage countries like China and India. The network is complex and sometimes very difficult to manage.

Recently there are issues related to environmental pollution created by supply chain activities. If the network is global, it requires more transportation to move goods from place to place. Because of this, there is more damage to environment. As a measure to reduce pollution, companies may go back to local sourcing and manufacturing instead of outsourcing from other countries even though it cost more. As part of green supply chain networks, initiatives are taken in this direction.

1. As a supply chain manager, how do you evaluate this situation?
2. Why pollution control is important?
3. How will you control the industrial pollution?
4. In which way the operation management can help in reducing pollution.

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