Q.1. Define the term Material Handling and briefly explain the various factors that affect the selection of material handling equipment. (10)

Q.2. Explain the following in two lines (any five):
(a) Logistics Management
(b) Economic Order Quantity
(c) Computer Aided Maintenance
(d) Method and Work Study
(e) Waste Disposal Techniques
(f) Quality Control Tools
(g) Over-stocking Cost

(5x2=10)

Q.3. Explain the various Maintenance Management techniques used in major departments of hotels.

OR

Define the term ‘Maintenance’ and explain the various types of maintenance with relevant examples. (10)

Q.4. Calculate the standard production per shift of 8 hours duration, with the following data:
(a) Observed time per unit is 5 minutes
(b) Rating factor is 120% and
(c) Total allowance is 33.33% of normal time.

OR

What do you understand by Waste Management? Explain the various techniques involved in control and disposal of wastes. (10)
Q.5. Explain the various Quality Control techniques adopted by Quick Service Restaurants (QSRs).

(10)

Q.6. Explain the concept of purchasing along with the various techniques involved for strategic purchasing.

**OR**

What do you understand by Inventory Management? Explain the various techniques used for Inventory Control.

(10)

Q.7. Write short notes on **any two**:
(a) TQM
(b) Value Analysis
(c) JIT
(d) Ergonomics

(2x5=10)

Q.8. Explain the packaging and distribution system of Railway Catering in India.

**OR**

Explain the physical distribution channels adopted by FMCG (Fast Moving Consumer Goods) companies in India.

(10)

Q.9. Distinguish between the following **any two**:
(a) Time Study and Motion Study
(b) Standardisation and Codification
(c) Preventive maintenance and Predictive maintenance

(2x5=10)
Q.10. A  Match the following:

| (i) Primary objective of materials management | (a) Planned maintenance |
| (ii) Determination of step by step processing of all jobs at each centre or machine | (b) Work measurement |
| (iii) A physical control system consisting of cards and containers | (c) Optimum investment in inventory |
| (iv) Maintenance activities that are carried out according to a pre-determined schedule | (d) Works study |
| (v) Measuring the work content of any activity under study | (e) Kanban |
| | (f) Sequencing |
| | (g) Scheduling |

B  Choose the right answer:

(i) Equipment oriented system of material handling consist of:
- Manual system
- Transferring system
- Conveyor system
- Bulk handling system

(ii) JIT concept was implemented by:
- General Electric Co.
- Mc. Donald
- Toyota Motor Co.
- General Motors

(iii) Assignment of jobs to various work centres or machines for future processing:
- Sequencing
- Expediting
- Scheduling
- Loading

(iv) Basic codification system includes:
- Alpha-numeric system
- Factor rating
- Point system
- None of these

(v) Technology which uses computers for designing and development of new products:
- MRP
- Multimedia
- Ergonomics
- Computer aided design

(5+5=10)