

Paper-9
OPERATIONS MANAGEMENT
AND
INFORMATION SYSTEMS
Test Paper –II/9//OMS/2008/T-4

Time Allowed: 3 hours

Marks: 100

SECTION-I
OPERATIONS MANAGEMENT

Full Marks: 50

(Answer Question 1 and any TWO from the remaining)

- Q1]** Distinguish between:
- (i) Job Evaluation and Value Analysis.
 - (ii) Time Study and Motion Study.
 - (iii) Preventive Maintenance and Break down maintenance.
 - (iv) Sales Turnover and Labour Turnover
 - (v) Production and Productivity
- 20**
- Q2]** (a) What is Value Analysis? **5**
- (b) Describe the main phases of a Value Analysis exercise. **5**
- (c) It may generally be said that Value Analysis leads to Cost Reduction. Can you give some specific benefits which may be expected when Value Analysis is effectively used within a manufacturing organisation? **5**
- Q3]** (a) Write in a few lines what you understand by:-
- (i) Process layout
 - (ii) Standardisation
 - (iii) Job analysis
 - (iv) Group incentive system
 - (v) Productivity
 - (vi) Opportunity Cost.
- 6**

- Q3] (b)** (i) What are the characteristics of job order production? **3**
(ii) How can labour productivity be calculated? **3**
(iii) What is 'Gantt Chart'? How is it used? **3**

- Q4] (a)** Give six factors which affect quantity of product in a manufacturing organisation. **5**
(b) State five production processes where SQC can be useful employed. **5**
(c) State the precautions required in sampling for statistical quality control. **5**

Q5] The activities in respect of a maintenance project are as below:

Activity	1-2	1-3	1-4	2-5	3-6	3-7	4-7	5-8	6-8	7-9	8-9
Months	2	2	1	4	5	8	3	1	4	5	3

- (a) Draw the project network and find the critical path and duration of the project.
(b) Determine total float, free float and independent float. **15**
- Q6] (a)** What do you mean by loading a production set-up? List various steps in carrying out loading over a sequence of operation. **7**

Q6] (b) What is Flow Process Chart?

SECTION-II
INFORMATION SYSTEMS

Full Marks: 50

(Answer All)

- Q1] (a)** What are the cost components for implementation of ERP System?
Q1] (b) Name and describe some common modules of an ERP System ?
Q1] (c) What is methodology followed for implementation of ERP System? **18**

- Q2] (a)** What are different risk factors in an Information system and how they are to be controlled ?
Q2] (b) What methodology do you propose to minimize risk in operation of a system ?
Q2] (c) What do you propose to create a proper processing environment ? What are the controls for an good processing environment ? **16**

Q3] Write Short Notes on :

- (vii) Knowledge Management ?
- (viii) Business Process Re-engineering (BPR)
- (ix) Expert System
- (x) Artificial Intelligence
- (xi) Decision making process