

ROLL No.....

NATIONAL COUNCIL FOR HOTEL MANAGEMENT
AND CATERING TECHNOLOGY, NOIDA**ACADEMIC BATCH - 2013-2015**

COURSE : 4TH Semester of 2-year M.Sc. in HA
SUBJECT : Production & Operations Management
TIME ALLOWED : 03 Hours MAX. MARKS: 100

(Marks allotted to each question are given in brackets)

Q.1. What are the various types of plant layouts? Briefly explain.

OR

You are working as Chief Manager in a leading hotel. Your management assigns you the responsibility to obtain the ISO Certification. What are the various steps will you follow to obtain the certification?

(10)

Q.2. List and explain the various techniques used in classification of inventories.

(10)

OR

A manufacturing company uses 25000 components per year. Each costing Rs.1000/-. If it costs Rs.200/- for placing the order and the inventory costs are Rs.100/- per unit per year:

- (a) How many components should be ordered at a time for maximum economy?
(b) How many orders should be placed in a year?

(5+5=10)

Q.3. Define the meaning in two lines for **any five** of the following:

- (a) Standard capacity
(b) Aggregate planning
(c) Normal time
(d) Scheduling and Sequencing
(e) Operation management
(f) VED Analysis
(g) Productivity

(5x2=10)

Q.4. Explain the importance of forecasting in operation management. Briefly explain the various methods of forecasting.

(10)

Q.5. What is MRP? List and explain the various elements involved in MRP. (10)

Q.6. JIT calls for elimination of wastes. List the wastes which JIT focuses to eliminate. Briefly explain.

OR

Following tasks are to be performed on the assembly line in the sequence and times specified

Task	Task time seconds	Task that must precede
A	50	-
B	40	-
C	20	A
D	45	C
E	20	C
F	25	D
G	10	E
H	35	B,F,G

- (a) Draw a schematic (precedence or flow diagram).
 (b) What is the theoretical number of work stations required to meet demand of 400 units per day (a day operating at one shift containing 8 hours.)
 (5+5=10)

Q.7. What is work methods study and analysis? Briefly explain the steps involved in work methods study.

OR

A restaurant owner wanted to observe one of its chefs who were making a dish. Following are the observations made containing **five** observations:

Observation	Time in minutes
1	5.2
2	5
3	4.8
4	4.85
5	5.15

Performance rating of the Chef for making this particular dish is 0.9.
 Allowances given for tea break and other activities is 20%.

Calculate:

- (i) Normal time
 (ii) Standard time for making the dish

(10)

Q.8. Write short notes on **any two** of the following:

- (a) CIM
- (b) Fish-bone diagram
- (c) Kanban systems

(2x5=10)

Q.9. As a restaurant manager, apply the concepts of Total Quality Management (TQM) and list the areas or functions where the improvement has been identified.

(10)

Q.10. **A** Choose the right answer:

- (i) Operation management deals with:
 - (a) manufacturing sectors
 - (b) service sectors
 - (c) both manufacturing and servicing
 - (d) none of the above

- (ii) Production and planning control is responsible for:
 - (a) Identifying new products
 - (b) promotion of product in the market
 - (c) scheduling the manpower for production
 - (d) purchase of raw materials

- (iii) ABC analysis deals with:
 - (a) inventory classification
 - (b) production planning
 - (c) scheduling machines in order
 - (d) failure analysis of bad goods

- (iv) Hotel facilities are designed as per:
 - (a) product layout
 - (b) fixed layout
 - (c) process layout
 - (d) cellular layout

- (v) Technology which uses computer for designing new products, modification is:
 - (a) computer aided design
 - (b) just in time
 - (c) MRP
 - (d) group technology

B Match the following:

(i) Process of conversion of raw materials to goods	(a) Maintenance stores
(ii) Systematic and scientific method of probing the future	(b) Aggregate planning strategy
(iii) Hiring and firing the workers to meet demand	(c) Forecasting
(iv) Involves mass production of single product	(d) Job production
(v) To match the level of operations to the demand	(e) Operation management
	(f) Layout planning
	(g) Product layout

(5+5=10)
