

NATIONAL COUNCIL FOR HOTEL MANAGEMENT
AND CATERING TECHNOLOGY, NOIDA
ACADEMIC BATCH - 2011-2013

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. A Choose the right answer:

- (i) For high volume of production which of the following lay out is used:
(a) Process layout
(b) Product layout
(c) Fixed layout
(d) Cellular layout
- (ii) Which of the following function is decided by top management?
(a) Location selection for new plant
(b) Arranging raw material for production
(c) Designing the new product
(d) Scheduling the manpower for production
- (iii) With the increase in lot size of purchase, the inventory carrying cost will:
(a) Increases
(b) Decreases
(c) Remains constant
(d) May increase or decrease
- (iv) Cleaning, lubrication, periodic overhaul of machines is:
(a) Routine maintenance
(b) Breakdown maintenance
(c) Quality control
(d) None of the above
- (v) Automatic handling, loading, unloading of material for machining operations is called:
(a) Computer aided design
(b) Just in time
(c) Robotics
(d) Group technology

B Match the following:

(i)	Production of goods according to orders of customers	(a) Maintenance stores
(ii)	Systematic and scientific method of probing the future	(b) Capacity management
(iii)	Availability of vital spares essentially to meet emergency breakdown	(c) Forecasting
(iv)	Involves decision about physical arrangement of economic activity centres within a facility	(d) Job production
(v)	To match the level of operations to the demand	(e) Computer aided manufacturing
		(f) Layout planning
		(g) Maintenance scheduling

(5+5=10)

Q.2. Define/ give the meaning in **two** lines for **any five** of the following:

- (a) Job design
- (b) Job enrichment
- (c) Process capability
- (d) MRP
- (e) Scheduling
- (f) Fixed layout
- (g) Productivity

(5x2=10)

Q.3. What is operations management? Explain with examples from the hospitality industry.

(10)

Q.4. Describe Delphi as a forecasting tool. Explain guidelines, advantages, disadvantages of Delphi.

(10)

Q.5. What are the factors which will influence the selection of a location for a new hotel (accommodation with restaurant facility)?

(10)

Q.6. Name any **five** QC tools and mention their use.

OR

The specification of one of the part calls for its width to be 3.000 ± 0.008 cm. the standard deviation of the process was estimated to be 0.003 cm. What is Cp of the process? What is your comment on the process based on Cp value?

(10)

Q.7. Define aggregate planning. Explain the various ways of aggregate planning. (10)

OR

A time study was conducted on a job and following is the observed time for six cycles:

Cycle No.	Observations (Minutes per cycle)
01	0.44
02	0.50
03	0.43
04	0.45
05	0.48
06	0.46

If the inspector gives the performance rating as 90%, calculate:

- (a) Average cycle time
- (b) Normal time
- (c) If allowance of 15% on job time is permitted, calculate the standard time. (2+4+4=10)

Q.8. What is MRP II? Explain its functions in details. (10)

OR

Processing time along with due dates waiting to be processed at the work centre are given in the following table:

JOB	MACHINE	
	Processing time (Days)	Due date (Days)
A	12	15
B	6	24
C	14	20
D	3	8
E	7	6

Determine the sequence of jobs, average job lateness, average no. of jobs in the centre as per the following scheduling rules:

- (i) SPT
 - (ii) EDD
- (5+5=10)

Q.9. Define TPM. Explain in detail the objective of TPM and how it differs from traditional maintenance procedures?

(10)

OR

Define design capacity, system capacity. What are the factors which influence system capacity?

(3+3+4=10)

Q.10. Write short notes on **any two** of the following:

- (a) Flexible manufacturing system
- (b) Bill of materials
- (c) ROBOTICS

(2x5=10)
