## EXAM DATE: 24.04.2018

ROLL No.....

## NATIONAL COUNCIL FOR HOTEL MANAGEMENT AND CATERING TECHNOLOGY, NOIDA ACADEMIC YEAR - 2017-2018

COURSE	:	2 <sup>nd</sup> Semester of M.Sc. in HA		
SUBJECT	:	Equipment & Materials Manageme	nt	
TIME ALLOWED	:	03 Hours	MAX. MARKS:	100

(Marks allotted to each question are given in brackets)

Q.1. What is material handling? List and briefly explain **any five** material handling equipment.

(3+7=10)

Q.2. Effective operational layout can help in better selection of material handling equipment. Comment.

**OR** An auto industry purchases spark plugs @Rs.25/- per piece. The annual consumption of spark plug is 18000 (in no.). If the ordering cost is Rs.250/- per order and carrying cost is 25% per annum, what would be the Economic Order Quantity?

(10)

(2+8=10)

(10)

Q.3. Define method study. What are the factors that forces an organisation to conduct method study?

OR

Write an essay on recycling and disposal of water.

- Q.4. Write short notes on **any four**:
  - (a) Predictive maintenance (b) Integrated inventory management
  - (c) Total quality management (d) Objectives of material handling
  - (e) Factors affecting quality standards in a manufacturing unit

(4x5=20)

Q.5. What is work measurement? Explain **any five** techniques that can be used for work measurement.

(2+8=10)

Q.6. Discuss the importance of inventory management in relation to ensuring smooth operations. Also list **any five** inventory management techniques.

(6+4=10)

Q.7. What is maintenance management? Explain the different types of maintenance with suitable examples.

(2+8=10)

OR

ABC company has kept records of breakdown of its machines for a 300-day work year, as shown below:

No. of breakdown	Frequency in days
0	40
1	150
2	70
3	30
4	10
	300

The firm estimates that each breakdown costs Rs.650/- and is considering adopting a preventive maintenance program which would cost Rs.200/- per day and limit the number of breakdown to an average of one per day. What is the expected annual savings from preventive maintenance program?

(b)

(10)

- Q.8. Define the following:
  - (a) Economic Order Quantity
  - (c) Routing
  - (e) Logistics management
- Q.9. Match the following:
  - (a) Economic Order Quantity
  - (b) Waste disposal
  - (c) Fork lift truck
  - (d) Time study
  - (e) Work measurement
  - (f) Motion study
  - (g) Kanban
  - (h) Materials management
  - (i) Codification
  - (j) ABC analysis

(d) Scheduling

Carrying cost

(5x2=10)

- (i) Incineration
- (ii) Carrying cost
- (iii) Stop watch
- (iv) Load
- (v) Analytical
- (vi) Cards and containers
- (vii) Path

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- (viii) Identification
- (ix) Optimum inventory
- (x) Inventory management

(10x1=10)

CODE: E&MM/05/APR/18/NC