

[This question paper contains 4 printed pages.]

3089

Your Roll No.

MEM (PE)

J

Paper – ME.606

MATERIALS MANAGEMENT

Time : 3 Hours

Maximum Marks : 100

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

Attempt any FIVE questions.

Assume suitable missing data, if any.

1. (a) Differentiate between wastivity and productivity and explain whether reducing wastivity and increasing productivity imply one and the same thing. (8)
- (b) Explain exchange curve and aggregate inventory concept. (7)
- (c) Show that under-estimation is costlier than over-estimation. (5)
2. (a) Describe the role of selective inventory management. Show how ABC, VED and FSN analysis are useful in inventory control. (7)

P.T.O.

- (b) Explain different types of structures used in purchasing organisation. (6)
- (c) Explain the procedure of multi-item budget constrained problem. (7)
3. (a) What are the various vendor rating plans ? Explain one in detail. (7)
- (b) What are the reasons for classification, codification and standardization of materials ? (7)
- (c) Describe the functions of value engineering department. What is value analysis ? (6)
4. (a) Explain finite replenishment rate model and calculate optimum cost, economic lot size and derive special cases of the model. (12)
- (b) Consider the following data :
- | | |
|-------------------------|--------------------|
| Units cost | - Rs. 100 |
| Setup cost | - Rs. 160 |
| Inventory carrying cost | - Rs. 20 |
| Demand rate | - 10000 units/year |
| Production rate | - 50000 units/year |
- Compute the following :
- (i) Minimum cost batch quantity.
- (ii) Time between two production runs. (8)

5. (a) What are the advantages and disadvantages of decentralize material management system? (6)
- (b) Discuss the importance of material management in context of supply chain management. (7)
- (c) What are the assumptions of classical model? (7)
6. A trading company starts its operations on 1st August 2009. Its stock register reveals the following data regarding purchases of goods in August 2009 :

Aug. 1	-	Receipts 500 units at the rate of Rs. 25.00 per unit.
Aug. 3	-	Issue 350 units.
Aug. 7	-	Issue 100 units.
Aug. 11	-	Receipts 700 units at the rate of Rs. 23.00 per unit.
Aug. 15	-	Issue 250 units.
Aug. 20	-	Receipts 400 units at the rate of Rs. 30.00 per unit.
Aug. 24	-	Issue 600 units.
Aug. 29	-	Issue 200 units.

Value the closing stock and cost of the goods sold under : LIFO method and FIFO method. (20)

P.T.O.

7. Write short notes on any **FOUR** of the following :

(a) MISS model

(b) Objective of contract

(c) Six rights

(d) Inventory information system

(e) Zero inventory policy (4×5=20)