

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2018****Subject Code:2161501****Date:28/04/2018****Subject Name:Materials Management****Time:10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain the objectives of MM. 03
(b) Discuss role of value analysis in purchasing. 04
(c) Describe the procedure for disposing the surplus and obsolete items. 07

- Q.2** (a) Explain fixed order quantity system. 03
(b) Explain the importance of materials management. 04
(c) Write note: Types of Purchasing Systems. 07

OR

- (c) Write notes: ABC analysis. 07
Q.3 (a) Explain any one selective inventory control techniques. 03
(b) What are the advantages of good store keeping? 04
(c) Given that (i) Annual usage, $U=60$ units, (ii) procurement cost, $P=Rs.15$ per order (iii) cost per piece, $C=Rs. 100$ (iv) cost of carrying inventory I , a percentage including expenditure on obsolescence, taxes, insurance, deterioration etc. = 10%. Calculate E.O.Q. 07

OR

- Q.3** (a) Discuss various categories of inventory in any organization. 03
(b) Discuss principles of good stores layout. 04
(c) Explain in brief, the factors affecting Make or Buy decision. 07
Q.4 (a) Discuss sources of supply and supplier selection. 03
(b) Discuss Two-bin system of inventory control. 04
(c) Find Economic order quantity Q and Maximum inventory M from the following data: $U=10,000$ Units, $P=Rs. 100$ per order, $C=Rs. 10$ per unit, $B=Rs. 15$ per each backorder incurred, $I=20\%$. 07

OR

- Q.4** (a) Short note on standardization. 03
(b) Explain codification with illustration. 04
(c) 1000 ml bottles are used for certain tablets and powders. Annual requirements are 3, 00,000 and unit price is Rs. 8. The cost of holding stock is 15% per annum and Ordering cost is Rs. 5. Find a) EOQ b) No. of orders to be placed in a year. 07
Q.5 (a) What is Vendor rating? 03
(b) What do you understand by materials research? 04
(c) Discuss role and scope of materials control function in a foundry. 07

OR

- Q.5** (a) Discuss sub contracting. 03
(b) Explain materials requirement planning. 04
(c) Bring out the main points of difference between ordering cost and inventory carrying cost. 07
