

First Semester M. E. Civil Engg. (Const. Engg. and Mgmt.) Examination

CONSTRUCTION MATERIAL AND MATERIAL MANAGEMENT

Paper - 1 CM 02

P. Pages : 3

Time : Three Hours]

[Max. Marks : 80

- Note :** (1) Due credit will be given to neatness and adequate dimensions.
(2) Illustrate your answer wherever necessary with the help of neat sketches.
(3) Use pen of Blue/Black ink/refill only for writing the answer book.

1. (a) Explain necessity of Integrated Material Management along with its advantages. 8
- (b) What is the necessity of classification of Material ? Explain classification according to condition and useability of Materials. 6

OR

2. (a) Enumerate and discuss each of the merit of codification. 8
 - (b) A certain manufacturer of electric appliances has decided to include electric bulbs in their product range. The electric bulbs as per the company's plan shall be supplied only six ratings. 10 Watts has been chosen as the lowest rating and 100 watts as the highest rating. Using preferred numbers what six different ratings should the company make ? 6
3. (a) List various functional Budgets and explain Material Budget in detail. 8
 - (b) Explain the importance of Store Layout in Store Keeping. 5

OR

4. (a) List various principles of Material Handling and explain principle related to equipments. 8
- (b) What is meant by Stock Taking? 5

5. (a) Explain "EOQ" model with no shortage and zero lead time with derivation for q_{opt} and C_{min} . 8
- (b) A contractor has to supply 10,000 bearings per day to an automobile manufacturer. He finds that when he starts a production run, he can produce 25000 bearings per day. The cost of holding bearing stock for one year is Rs.2 per unit and set-up cost of a production run is Rs.1800. How frequently should production run be made ? 5

OR

6. (a) A manufacturer has to supply 10,000 units of his product per year. Shortages are not allowed and the storage cost amounts to Rs.1.00 per unit per year. The set up cost per set up is Rs.100.
Find :
(i) The optimal run size. (q_{opt})
(ii) Optimum scheduling Period. (t_{opt})
(iii) Minimum total expected cost per year. 5
- (b) Explain EPQ model (Economic Production Order) 8
7. (a) Describe Centralized and Decentralized Purchasing. 5
- (b) Discuss about various phases in purchasing decision process. 8

OR

8. (a) Explain Six Sigma Quality Concept with neatly drawn curves and important formulas. 8
- (b) Describe methods of evaluating suppliers performance. 5
9. (a) Discuss factors affecting "Make or Buy" Decision. 8
- (b) Explain briefly about the dangers associated with outsourcing. 5

OR

10. (a) Explain Negotiation as process and list important factors which may weaken Buyers Negotiating Position. 5

(b) What is the important of properly designed performance appraisal system? 8

11. (a) List and discuss importance of each of the document used in International Trade. 8

(b) What in the importance of Material Audit? 5

OR

12. (a) Discuss about policies for Foreign Purchase. 5

(b) Explain necessity of Good "Material Information System." 8



