

Total No. of Questions : 8]

SEAT No. :

P-9080

[Total No. of Pages : 3

[6179]-205

S.E. (Civil)

PROJECT MANAGEMENT

(2019 Pattern) (Semester - IV) (201012)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
- 2) *Figures to the right indicate full marks.*
- 3) *Assume Suitable data, if necessary.*
- 4) *Use of calculator is allowed in the examination.*
- 5) *Neat diagrams must be drawn wherever necessary.*

- Q1)** a) Discuss the objectives of material management. [5]
b) Explain the various safety measures to be taken in case of high-rise building construction. [5]
c) The annual demand of a construction item by a firm is 6400 units. The unit cost is Rs. 6 and inventory carrying cost per unit per annum is 25% of the average inventory cost. If the cost of procurement is Rs. 75, determine (i) economic order quantity (ii) Number of orders per annum [7]

OR

- Q2)** a) Explain with a neat sketch Site layout for a residential building construction site. [5]
b) The construction company has an inventory of 8 items. Following table shows the annual consumption of the items used in a project and their unit cost. Classify them in A,B,C classes. [12]

Item No.	Annual Consumption in Unit	Unit Cost (Rs.)
1	12000	3.00
2	22000	2.50
3	1900	1.70
4	45000	2.80
5	3500	1.70
6	60000	1.50
7	9000	2.00
8	32000	3.00

P.T.O.

- Q3)** a) Discuss with sketch Resources Levelling and Resources Smoothing. [5]
- b) Explain different steps involved in Project Updating in a construction project. [5]
- c) Discuss the various performance of measurement parameters of Earned value Management. [8]

OR

- Q4)** a) Explain Project Monitoring and discuss any one method of it. [5]
- b) The following table lists four activities of a construction project along with normal and shortest duration of completing the activity and the cost of reduction per day. The Project overhead costs are Rs. 2000 per week. Find the optimum duration and cost associated with it. Also draw least cost network for following project [13]

Activity	Normal duration (weeks)	Normal Cost (Rs.)	Crash Duration (Weeks)	Crash Cost (Rs.)
1-2	4	4000	2	12000
2-3	5	3000	2	7500
2-4	7	3600	5	6000
3-4	4	5000	2	10000

- Q5)** a) Define the following: [5]
- Cost
 - Value
 - Price
 - Rent
 - Simple Interest
- b) Discuss Elasticity of Demand and supply. [5]
- c) Explain Law of Diminishing Marginal Utility and Law of Substitution. [7]

OR

- Q6)** a) Discuss the various factors Affecting Price Determination. [5]
 b) State and explain the various Sources of Project Finance. [5]
 c) Explain Supply curve and demand curve with neat diagram. [7]

- Q7)** a) List the various types of project appraisal and explain any one in detail. [6]

- b) A construction company has the resources to implement one of the two projects that have been offered to it. Using NPV suggest the one project the company should accept. The expected returns are 12% per annum. [12]

Particulars	Project A	Project B
Initial Investment (Rs.)	4,00,000	3,50,000
Annual Income (Rs.) Year 1	1,50,000	1,00,000
Annual Income Year 2	2,00,000	3,00,000
Annual Income Year 3	80,000	50,000
Annual Income Year 4	1,00,000	90,000
Annual Income Year 5	20,000	60,000

OR

- Q8)** a) Explain with figure breakeven analysis. [6]
 b) Discuss role of project management consultant in pre tender and post tender stage. [6]
 c) Differentiate between NPV and IRR. [6]

