

Total No. of Questions : 8]

SEAT No. :

**P597**

[Total No. of Pages : 3

[5869]-210

**S.E. (Civil)**

**PROJECT MANAGEMENT**

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

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn whenever necessary.
- 3) Figures to the right indicates full marks.
- 4) Assume suitable data, if necessary.

**Q1) a) Carry out ABC analysis for the following items and plot ABC curve.[10]**

Item No.	Item	Annual Expenditure (Rs.)
1	Cement	5,00,000
2	Sand	3,00,000
3	Bricks	1,00,000
4	Siporex Blocks	2,50,000
5	Paint	60,000
6	Steel	4,50,000
7	Tiles	70,000
8	Oil	2,000
9	Course Aggregate	95,000
10	Electrical fitting	50,000
11	Nails	1,500
12	Timber	42,000

- b) What are the responsibilities of a safety manager on construction sites?[4]
- c) Explain the use of Project Management Software's in Construction Industry. [4]

OR

**P.T.O.**

- Q2)** a) Define the terms : [8]
- i) Safety stock
  - ii) Lead time
  - iii) Inventory
  - iv) EOQ
- b) What are the objectives of material management? [4]
- c) A construction company purchases 10,000 bags of cement annually. Each bag of cement cost Rs. 300/- and the cost incurred in procuring each lot is Rs. 200/-. The cost of carrying is 25%. What is the most Economic order Quantity? What is the average inventory level? [6]

- Q3)** a) What is network crashing? Explain with suitable example. [8]
- b) Explain resource smoothing and leveling. Use diagram wherever required. [5]
- c) Explain Project Management software in construction site planning. [4]

OR

- Q4)** a) What do you mean by Earned Value Analysis? Explain any one method in detail. [5]
- b) What are the objectives of Resource leveling? Explain the procedure of carryout resource leveling. [8]
- c) Explain the term Rescheduling and Updating. [4]

- Q5)** a) Explain demand and supply curve and factors affecting on it. [5]
- b) How to calculate simple and compound interest? What is the difference between simple interest and compound interest payable on principal of Rs. 15,000 in 2 years at the rate of 8% p.a. [8]
- c) What are the factors affecting on Price Determination? [5]

OR

- Q6)** a) Difference between Costs, Value. [8]
- b) Explain the types of Capital. [6]
- c) Explain the FDI in Infrastructure. [4]

**Q7)** a) Following are the details of Project A and B. Using NPV ( $i = 8\%$ ). Comment on the following statements: [10]

- i) Whether both projects are feasible?
- ii) Whether both projects are not feasible?
- iii) Either of the A or B is feasible?

Years	Project A	Project B
Initial Investment	4,00,000	4,50,000
1	1,20,000	1,40,000
2	1,25,000	1,45,000
3	78,000	76,000
4	80,000	65,000
5	75,000	60,000
6	-	90,000

b) Explain in detail the role of Project Management Consultants in Civil Engineering field. [7]

OR

**Q8)** a) Write a short note on: [9]

- i) NPV
- ii) IRR
- iii) Pay-Back Period

b) Discuss the following: [8]

- i) Selection Criteria for project
- ii) Detailed Project report

