

Total No. of Questions : 8]

PB3600

SEAT No. :

[Total No. of Pages : 3

[6261]-5

S.E. (Civil)

PROJECT MANAGEMENT

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

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) *Figures to the right indicates full marks.*
- 3) *Neat figures must be drawn wherever necessary.*
- 4) *Assume suitable data if required.*

Q1) a) Write a short note on: **[6]**

- i) Purchase Order
- ii) Material Receipt

b) How do you inspect quality of material like sand and aggregate on your site? **[5]**

c) Define Inventory and list out step by step process to conduct ABC analysis. **[6]**

OR

Q2) a) A construction Company purchases 12000/- Bags of Cement Annually with effective cost Rs. 315/-per Bag, the cost of procurement = Rs. 150 per lot & holding cost is 20%. Calculate EOQ. **[5]**

b) What are the objectives of Materials Management? Explain any two. **[6]**

c) What safety precautions would you take to avoid accidents on tunneling site? Explain safety programme undertaken. **[6]**

P.T.O.

- Q3)** a) What is MSP? State its Importance in Construction Sector. [5]
 b) Write a short notes on: [6]
 i) Objectives of Resource Smoothing.
 ii) Steps in Resource Smoothing.
 c) Explain different methods of EVA. Explain any one in details. [6]

OR

- Q4)** a) Explain Step by step process of Network Crashing? [5]
 b) What is Cost Slope and how it is determined? [4]
 c) Following table shows the data of small construction project.

Draw the network diagram and update the network by using the following conditions at the end of 10 days. [8]

- i) What is the change in the project duration?
 ii) What is remaining duration of project?

Activity	1-2	2-3	2-4	3-5	4-5	5-6	5-7	6-7
Duration (Days)	4	6	5	2	2	1	4	6

At the end of 10 days review was taken which indicates

- 1) Activity 1-2 & 2-4 was completed as originally planned.
- 2) Activity 2-3 & 3-5 delayed drastically and requires 5 & 6 more days respectively for their completion.
- 3) Activity 4-5 & 5-6 is in progress and both require 8 more days for their completion.
- 4) Activity 6-7 yet to start and the original time estimate still appear to be accurate.
- 5) Activity 5-7 requires 8 days in place of 6 days for its completion.

- Q5)** a) Define : Cost, Value, Wants & Goods. [6]
 b) Explain Fixed & Working Capital. [6]
 c) What is Annuity? Explain how future value of Annuity is Calculated. [6]

OR

- Q6)** a) Define : Price, Wealth, Rent & Money. [6]
 b) Explain Law of Diminishing Marginal Utility. [6]
 c) Explain factors affecting price determination. [6]

- Q7)** a) Write a short note on 'Role of PMC' in pre-tendering. [6]
 b) What do you mean by Project Appraisal? Explain Methods of Project Appraisal. [6]
 c) Explain importance of Project Feasibility Report. [6]

OR

- Q8)** a) Write a Short note on 'Cost Benefits Analysis'. [4]
 b) Following Data pertains to 2 Projects. Rank the Projects based on B/C ratio & NPV values [8]

Particulars	Project A	Project B
Investment	Rs. 1,10,000/-	Rs. 1,10,000/-
Cash Inflow Year 1	Rs. 31,000/-	Rs. 71,000/-
Cash Inflow Year 2	Rs. 40,000/-	Rs. 40,000/-
Cash Inflow Year 3	Rs. 50,000/-	Rs. 40,000/-
Cash Inflow Year 4	Rs. 70,000/-	Rs. 20,000/-
Interest Rate	14%	14%

- c) Explain 'Pay-back Period' with example. [6]

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