

Total No. of Questions : 12]

SEAT No. :

**P4565**

[Total No. of Pages : 3

**[4958] - 1010****T.E. (Civil)****PROJECT MANAGEMENT & ENGINEERING ECONOMICS****(2012 Pattern) (Semester - II)***Time : 2½ Hours]**[Max. Marks : 70**Instructions to the candidates:*

- 1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10, Q11 or Q12.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume Suitable data if necessary.*

*Q1)* Discuss in detail importance of project management in construction industry. [6]

OR

*Q2)* Explain in detail Evolution of scientific management. [6]

*Q3)* Draw AOA Network and Calculate total Project Duration. Show critical path. Calculate EST, EFT, LST, LFT [8]

Activity	Duration (Days)	Activity	Duration(Days)
1-2	4	4-7	Dummy
2-3	5	5-10	10
2-4	7	6-8	6
2-5	4	7-8	7
3-10	15	8-9	12
4-6	7	9-10	10

OR

**P.T.O.**

- Q4)** Write short note on: [8]
- a) importance of planning and network techniques in civil engineering works.
  - b) Bar chart & its limitation.

- Q5)** Explain the direct & indirect cost of an activity with example. [6]

OR

- Q6)** Explain Resource leveling and Resource smoothening by giving suitable examples. [6]

- Q7)** a) Give two definition of Economic quoted by different Economists. Explain the importance of Economics in construction industry. [6]
- b) Explain demand & supply with suitable example. [6]
  - c) Define capital. Explain fixed and working capital. [6]

OR

- Q8)** a) What is Market Equilibrium. Explain in short Equilibrium Price and Equilibrium Quantity with an example? [6]
- b) Explain “Time value of money” with an example. [6]
  - c) Write short note on: [6]
    - i) Annuity
    - ii) Elasticity

- Q9)** a) What is ABC analysis? Write in details about the same giving examples. [6]
- b) Write down safety programme for road project. [6]
  - c) Write short note on : Duties of store keeper. [4]

OR

- Q10)a)** Following table shows annual expenditure of the material used in a construction project. Classify them in A,B,C classes and plot the ABC Curve. [6]

Sr.No	Item	Cost in Rs
1	Cement	1,80,000
2	Sand	35,000
3	Steel	1,49,000
4	Aggregates	90,000
5	Nail	3,200
6	Water	2,500
7	Containers	1,200

- b) Bring out the importance of material management in construction industry. [6]  
 c) Write short note on: Personal Protective Equipment [4]

- Q11)a)** What do you mean by project appraisal? Explain social & Environmental type of appraisal [8]  
 b) Write short note on: [8]  
 i) Cash flow [www.sppuonline.com](http://www.sppuonline.com)  
 ii) IRR method

OR

- Q12)a)** A company wishes to invest in a new project. It has two alternatives A & B. Following data is available. Which project will the company select based on NPV and IRR [8]

Particulars	Project A	Project B
Initial Investment	10,50,000	12,75,000
Cash Inflows in Rs		
Year 1	5,50,000	7,50,000
2	7,00,000	5,00,000
Interest Rate	10%	10%

- b) Write short note on : [8]  
 i) Detailed project report.  
 ii) Role of project management consultant.

