

Seat No.	
----------	--

T.E. (Civil) (Part - II) (Semester - VI) (New Course)
Examination, April - 2016
ENGINEERING MANAGEMENT
Sub. Code: 66875

Day and Date : Thursday, 21 - 04 - 2016
 Time : 3.00 p.m. to 6.00 p.m.

Total Marks : 100

- Instructions :
- 1) All questions are compulsory.
 - 2) Use of Non programmable calculator is allowed.
 - 3) Figures to the right indicate full marks.

SECTION - I

- Q1) a)** Define management and explain in brief Directing Function of Management. [6]
- b) What do you know about Decision Tree? [5]

OR

Explain types of communication.

- c) Explain in brief the various principles of management given By Henry Fayol. [7]
- Q2) a)** Write a note on sensitivity analysis. [5]
- b) Solve the following linear programming problem by using graphical method [6]

$$\text{Maximize } Z=6X_1 + 8X_2$$

$$\text{Subject to } 5X_1 + 10X_2 \leq 60$$

$$4X_1 + 4X_2 \leq 40$$

$$X_1 \text{ and } X_2 \geq 0$$

P.T.O.

- c) Get IBFS in the following transportation problem by N-W corner cell method Also state the cost [6]

	D1	D2	D3	D4	D5	Supply
S1	10	2	16	14	10	300
S2	6	18	12	13	16	500
S3	8	4	14	12	10	825
S4	14	22	20	8	18	375
Demand	350	400	250	150	400	

- Q3) a) State objectives of material management? [4]

OR

Explain ABC analysis method for Inventory control.

- b) Explain various steps in purchasing. [6]
- c) Construction company uses 1800 tons steel per year. It costs 35,000/- per ton. The cost of placing an order is Rs - 150/-. Determine EOQ if inventory carrying cost is 13% avg. inventory investment. [5]

SECTION - II

- Q4) a) Explain cash flow diagram with neat sketch. [3]
- b) Using EUAC method suggest which machine should be purchased, if the rate of interest in 15% [8]

	Machine P	Machine Q
Initial Cost (Rs)	2,60,000/-	3,60,000/-
AOC(Rs)	8000/-	3000/-
Annual Labour		
Cost(Rs)	1,10,000/-	70,000/-
Extra Annual		
Income Tax (Rs)	-----	26,000/-
Salvage Value (Rs)	20,000/-	30,000/-
Life in Years	06	10

- c) Calculate effective interest rate if nominal interest rate is 12% per year compounded quarterly. [4]

OR

Draw Break Even Analysis Chart.

- d) Using Benefit Cost Ratio, state whether following project feasible or not? [5]

Initial Investment =Rs 7,00,000/-

Rate of Interest =10%

Benefits in first year =Rs 95,000/-

Benefits in second year =Rs1,25,000/-

Benefits in third year =Rs 1,45,000/-

Benefits in fourth year =Rs 1,55,000/-

- Q5) a) What are factors consider while drawing site layout? [5]
b) Draw typical site layout for multistoried building construction project.[5]
c) Describe the main provision of Child labour Act. [5]

OR

Explain main provision of Workmen's Compensation Act.

- Q6) a) Write short notes on Work Study. [5]
b) What do you know about value engineering. [5]
c) What are objective of quality circles. [5]

x x x