SV - 862

Seat No.	

Total No. of Pages : 2

T.E. (Civil) (Part - II) (Semester - VI) Examination, May - 2018
ENGINEERING MANAGEMENT
Sub. Code : 66875

Day and Date : Tuesday, 08 - 05 - 2018 **Total Marks : 100**

Time : 02.30 p.m. to 05.30 p.m.

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) Explain in brief the principles of management given by Henry Fayol. **[8]**

b) Enlist the types of organization. Explain any one in detail. **[6]**

c) Explain the process of decision making. **[6]**

Q2) a) Write a note on sensitivity analysis. **[5]**

b) Solve the following LPP by graphical method.

Maximum $Z = 5X_1 + 9X_2$ with constraints

Subjected to $3X_1 + 5X_2 \leq 90$

$4X_1 + 3X_2 \leq 75$

With X_1 and $X_2 \geq 0$ **[5]**

c) Determine an IBFS to the following transportation problem using North-West corner method. **[5]**

	D_1	D_2	D_3	D_4	Supply
S_1	5	3	1	4	14
S_2	7	8	2	5	16
S_3	4	3	6	2	5
Demand	6	10	15	5	35

P.T.O.

Q3) a) What are the functions of material management? [8]

b) A Construction company consumes 12,000 cement bags every year for its construction activities. It requires Rs. 250 to place order. Each bag cost Rs. 200. If inventory carrying cost is 12% of average inventory investment, find out EOQ. How many times the order be placed in a year. [7]

SECTION - II

Q4) a) Explain Importance of engineering economy in civil engineering field. [5]

b) The details are two construction machines are given below. Make a comparison if the rate of interest is 12% per year. Use EUAC method. [10]

	Machine A	Machine B
Initial cost (Rs.)	100000	170000
Annual O & M Cost (Rs.)	60000	50000
Salvage value (Rs.)	10000	20000
Service life (Year)	10	10

c) Define the following terms with neat sketch with reference to break even analysis. [5]

i) Fixed cost

ii) Variable cost

iii) Total cost

iv) Total sales

v) Breakeven point

Q5) a) Draw typical layout for multistoried building construction project. [5]

b) What are the factor consider while drawing site layout. [5]

c) Explain main provision of workmen's Compensation Act. [5]

Q6) a) Write short notes on Work Study. [5]

b) Explain concept of quality circle with related to civil engineering. [5]

c) What do you know about Value Engineering. [5]

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