

**B.Tech. Degree VIII Semester (Supplementary)
Examination, September 2008**

**CE 801 CONSTRUCTION MANAGEMENT II
(1999 Scheme)**

Time: 3 Hours

Maximum Marks: 100

- I An irrigation canal 10m at bottom, 5m deep with 45° side slopes is to be constructed by cut and fill. The length of the canal is 10 Km and is to be completed in 5 months time. The bed slope of the canal is 1 in 1000 and the natural slope of the ground as per longitudinal section is 1 in 2000. Service tracks of 4.0 m width with water bound macadam with earthen berms of 1.2m wide on both sides to be constructed on both sides of the canal. The type of soil is generally gravelly type with soft laterite at patches but not exceeding 25% of total cutting. As construction engineer in charge of the work you are required to work out the optimum plant and machinery requirement for the work. State reasons for your assessments. (20)

OR

- II a) What are the major engineering considerations in selecting earth moving plant machinery? Explain. (10)
- b) A construction company is thinking of replacing the existing concrete mixer A with a new mixer B. The present cost of mixer A is Rs.10,000/- and of B is Rs. 20,000/-. Both mixers have life of 5 years. The running expenditure on mixer B is Rs.1000/- per year. The running cost on mixer A is Rs. 4,000/- for the first year and additional Rs.400/- per year for next four years. No salvage value is expected from mixer 'A' and salvage value of Rs. 2000/- is expected from mixer B. As an advisor to the company find (i) present value of the mixer A and B at 12% interest rate. (ii) suggest whether the old mixer be replaced or not. (10)

- III a) Explain the significance of selective inventory control considering various techniques of selective inventory control. Also explain advantages and significance of ABC analysis. (12)
- b) Explain the significance of material management in construction industry. State how material management can be made effective. (8)

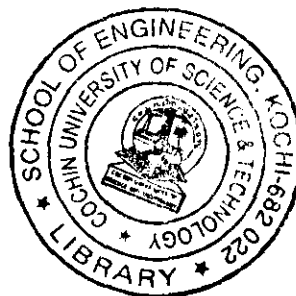
OR

- IV a) Find EOQ, maximum and minimum inventory from the data given below:

Average monthly requirement	:	4000 units
Inventory carrying cost	:	14% of the unit value/year
Cost of replacing order	:	Rs. 350/- per year
Cost per unit	:	Rs. 20/-

Also find the total cost purchase per year. Safety stock may be taken as Rs. 75/- of EOQ. (10)

(Turn Over)



- b) Find the initial feasible solution by Voget's approximation method and compare it with N.W. corner method for the transportation problem given below: (10)

Destination

Source	P	Q	R	S	Supply
A	3	3	3	2	16
B	2	3	2	4	25
C	4	6	3	1	34
D	5	4	3	1	25
Demand	29	25	26	20	100

- V a) Write brief essay on the evolution of corporate management. (10)
 b) What do you understand by ratio analysis? State the main types of ratio analysis and their significance? (10)

OR

- VI a) Write a brief essay on working capital, its formation management and significances. (8)
 b) Write short notes on the following:
 i) Short term financing
 ii) Cash budgeting
 iii) Shares matter in capital structuring (12)

- VII a) Explain the procedure of preparing a Balance Sheet. Prepare a format for balance sheet. (6)
 b) Explain the significance of the balance sheet for external and internal agencies. (8)
 c) What do you understand by adjustments? How adjustments are carried out in profit and loss accounts. (6)

OR

- VIII Write short notes on the following :
 i) Profit and loss accounts
 ii) Bank transactions
 iii) Ledger accounts
 iv) Trading profit
 v) Disclosure principle (20)

- IX A construction firm having branches in five different sectors of specialization wants to coordinate the activities at sector and Head Quarter levels. Suggest the process and steps involved in the development of such M.I.S. (20)

OR

- X a) Write a brief essay on the office automation system for a construction organization. (10)
 b) Write short notes on the following:
 i) Information system in life cycle
 ii) Composition of data files
 iii) File organisation methods
 iv) File design (10)