Code No: 55015

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## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD B. Tech III Year I Semester Examinations, December - 2014 MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS

(Common to ME, EIE, BME, IT, MCT, ECompE, BT, AME, MIE, MIM, MSNT)
Time: 3 hours

Max. Marks: 75

Answer any five questions All questions carry equal marks

1. What is demand? What are different types of demand?

2. The production function for Global Electronics is  $Q = 2K^{0.5}L^{0.5}$  with marginal product functions for labor and capital given by

$$MP_L = \frac{dQ}{dL} = 2\left(\frac{1}{2}\right)K^{0.5}L^{0.5} = \frac{K^{0.5}}{L^{0.5}}or\frac{\sqrt{K}}{\sqrt{L}}$$
 and

$$MP_K = \frac{dQ}{dK} = 2\left(\frac{1}{2}\right)K^{0.5-1}L^{0.5} = \frac{L^{0.5}}{K^{0.5}} \text{ or } \frac{\sqrt{L}}{\sqrt{K}} \text{ respectively. Assume that the capital}$$

stock if fixed at nine units. If the price of the output is Rs.6 per unit and the wage rate (w) is Rs.2 per unit, determine the optimal or profit maximizing rate of labor to be hired. What labor rate is optimal if the wage rate increased to Rs.3 per unit?

- 3. What are the objectives of pricing policy? Discuss clearly any two pricing methods.
- 4. What are the objectives of Demand forecasting? Discuss any 3 statistical methods of demand forecasting.
- 5. What is a business and what are its characteristic features?
- 6. A company is considering two mutually exclusive projects. Both require an initial cash outlay of Rs 10,000 each, and have a life of five years. The company's required rate of return is 10 per cent. The projects will be depreciated on a straight-line basis. Cash flows expected to be generated by the projects are as follows:

Cash Flow (Rs)						
Project	1	2	3	4	5	
Α	4,000	4,000	4,000	4,000	4,000	
В	6,000	3,000	2,000	5,000	5,000	

Find out a) Payback period and

b) Net present value.

Prepare a balance sheet from the following particulars.

Stock velocity : 6 Gross profit margin : 20% Capital turnover ratio : 2 Fixed assets turnover : 4

Debt collection period : 2 months Creditors payment period : 73 days

Gross profit Rs. 60,000

Excess of closing stock over opening was Rs.5, 000.

The following Trial Balance has been prepared wrongly. You are asked to prepare

the Trial Balance correctly

Name of Account	Debit Bal.	Credit Bal.
Cash in hand	4,000	
Purchase Returns		4,000
Wages	8,000	· · · · · · · · · · · · · · · · · · ·
Establishment expenses	12,000	
Sales returns	8,000	
Capital		22,000
Carriage outward	2,000	
Discount received		1,200
Commission earned		800
Machinery	20,000	
Stock at commencement	10,000	***
Debtors	8,000	
Creditors		12,000
Sales	-	44,000
Purchases	28,000	
Bank overdraft		14,000
Manufacturing expenses	14,000	
Loan from Ashok		14,000
Carriage inwards		1,000
Interest on Investment		1,000
	1,14,000	1,14,000

Closing stock was valued at Rs 30,000.