THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF ENGINEERING TECHNOLOGY
POSTGRADUATE DIPLOMA IN TECHNOLOGY IN INDUSTRIAL ENGINEERING – LEVEL 7
FINAL EXAMINATION – 2011/2012
MEM 7213 – INDUSTRIAL ECONOMICS AND FINANCIAL ACCOUNTS
DATE : *04 March 2012*
TIME : *0930 hrs – 1230 hrs*
DURATION : *Three (03) hours*

Answer three (03) questions from PART A including question 01 and two (02) questions from PART B. Answer only five (05) questions.

PART A

Compulsory Question

Q1. Dubey, Suby and Muffy formed a partnership trading pharmaceutical products. Following Trial Balance extracted from the books of Accounts on 30th September 2011.

Capital Accounts	Rs.	Rs.
Dubey		1,000,000
Suby		750,000
Muffy		500,000
Current Accounts		
Dubey		40,000
Suby		30,000
Muffy		20,000
Sales		5,000,000
Discounts Received		14,000
Trade creditors		140,000
Provision for Bad debts 01.10.2010		11,000
Stock 01.10.2010	150,000	
Rates	30,000	
Electricity	72,000	
Water	12,000	
Telephone	24,000	
Advertising	40,000	
Motor Vehicle expenses	120,000	
Salaries and wages	540,000	
General Expenses	22,000	
Purchases	2,000,000	
Land and Buildings (Buildings 1,250,000)	1,750,000	

Office Equipment	750,000	
Motor Vehicles	1,000,000	
Furniture and Fittings	250,000	
Discounts allowed	10,000	
Trade Debtors	200,000	
Selling Expenses	60,000	
Drawings-by		
Bubey	120,000	
Suby	120,000	
Muffy	120,000	
Balance at Bank	690,000	
Cash in hand	500,000	
Provision for Depreciation 01.10.2010		
Buildings		125,000
Office Equipment		300,000
Motor Vehicles		500,000
Furniture and Fittings		150,000
	8,580,000	8,580,000

You are informed that :-

- Stock on 30.09.2011 is Rs. 120,000
- Debey, Suby and Muffy shared profits and losses in the ratio of 5:3:2.
- Interest on capital 8% per year.
- Suby and Muffy should get 15,000/= per month as salary.
- Muffy is paid on extra allowance of Rs. 240,000/= as sales partner.
- A credit sale of Rs. 40,000 and credit purchase of Rs. 20,000 omitted from accounts.
- Depreciation of Buildings for the year Rs. 25,000/=.
- Depreciate office equipment and furniture and fittings 30% on cost and Motor Vehicles 25% on cost.
- Salaries and wages accrued Rs. 30,000/=.
- Rates paid in advance Rs. 5,000/=.
- Provision for Bad debts no more required.
- Compensation has to be paid to an ex-employee Rs. 75,000/=.

You are required to prepare Trading, Profit and Loss account, appropriation account and partners' current accounts for the year ended 30.09.2011.

(30 Marks)

Q2. Enter the following transactions that took place in the month of December 2011 in the accounting equation given below.

Accounting equation

Capital + Creditors = Non current assets + Stock + Debtors + Cash

- Solomon commenced business in textiles. He brought cash Rs. 750,000, motor vehicle costing Rs. 500,000/= and textiles for resale worth Rs. 100,000/= in to the business.
- He bought furniture and equipment for Rs. 75,000/=.
- He purchased textiles for Rs. 500,000/=.
- Paid Rent for December Rs. 15,000/=.
- Sold Textiles costing Rs. 100,000 for Rs. 75,000/=.
- Purchased Textiles from Chandra for Rs. 750,000/=
- Sold textiles costing Rs. 600,000 for Rs. 800,000/=.
- Sold textiles worth Rs. 600,000 for Rs. 900,000/= on credit.
- Soloman took away textiles costing Rs. 25,000/= and cash Rs. 250,000/=.
- Textiles given for charity Rs. 25,000/=.
- General Expenses of the month Rs. 40,000/=.
- Sold Motor vehicle for Rs. 750,000.
- Paid Chandra (creditor) Rs. 700,00 in full settlement of his claim.
- Rs. 800,000/= only collected from debtors balance treated as a discount allowed.

(15 Marks)

Q3. Colombia Producers make three compact disks namely H, M and V.
Their production, costs, and sales are given for the year ended 31.12.2011.

	Products		
	H	M	V
Production (units)	15,000	20,000	25,000
Sales (units)	15,000	20,000	25,000
Sale Price (per unit)	150/=	200/=	250/=

Variable Expenses	Per Unit (Rs.)		
Raw Materials – (Each 50/= per gramme)	50/=	75/=	100/=
Direct Labour cost	25/=	40/=	50/=
Variable overheads	25/=	35/=	40/=

Fixed overheads Rs. 1,250,000/=

You are required to calculate

a. Contribution per unit of production of each product H, M and V
b. Total contribution
c. Total Profit

(ii) If the Raw Materials available for production is only 3,000,000 grammes. What is the best mix for maximum contribution and profit?

(15 Marks)

Q4. Explain the following with Examples.

(i) Capital Expenditure and Revenue Expenditure.
(ii) Bank statement and Bank Reconciliation statement.
(iii) Budget and Project.

(15 Marks)

PART B

Answer any Two (02) Questions from part B.

(1) a) The short run production function of a firm is given below.

Q_L	TPP_L	MP_L	AP_L
1			08
2	22		
3		20	
4	60		
5			15
6		09	
7	84		
8			10

TPP_L - Total Physical Product of Labour
MPP_L- Marginal Physical Product of Labour
APP_L - Average Physical Product of Labour

(i) Fill in the table.
(ii) Identify the three stages of production. Explain, using illustrations.
(iii) What is the relationship between MPP_L and APP_L.
(iv) What is the most desirable stage of production for a producer?

(14 Marks)

b) Explain, using illustrations.

(i) Marginal Rate of Technical Substitution.
(ii) The Principal of Diminishing Marginal Rate of Technical Substitution.

(6 Marks)

(2) a) "The Monopolistically Competitive situation is more realistic and represents the actual market structure faced by most firms, where as Pure Competition and Pure Monopoly rarely exist in real life situations". Do you agree? Explain, using examples.

(14 Marks)

b) Using Kinked Demand Curve Model explain why there is relative price quantity stability in Oligopolistic Markets.

(6 Marks)

(3) a) i) What are the major Macro Goals of an Economy?

(4 Marks)

ii) What are the major barriers a country faces in achieving higher Economic Growth? Explain in relation to economies of the developing world.

(7 Marks)

b) Explain how the exchange rate of a currency is determined under Fixed Exchange Rate and Floating Exchange Rate Systems. What are the advantages & disadvantages of these systems?

(9 Marks)