

# The Open University of Sri Lanka

## Faculty of Engineering Technology



Study Programme	: POSTGRADUATE DIPLOMA IN TECHNOLOGY IN INDUSTRIAL ENGINEERING
Name of the Examination	: Final Examination
Course Code and Title	: MEM7213 - INDUSTRIAL ECONOMICS AND FINANCIAL ACCOUNTING
Academic Year	: 2014/15
Date	: 30th August 2015
Time	: 0930 hours -1230 hours
Duration	: 3 hours

### General instructions

1. Read all instructions carefully before answering the questions.
2. This question paper consists of 8 questions. All questions carry equal marks.
3. Answer three (03) questions including **Question 1** from **Part A** and two (02) questions from **Part B**.
4. Answer only **five (05)** Questions.

### PART A

1. The following Trial Balance was extracted from the books of Sapna Limited on 31.12.2014.

	Rs '000	Rs '000
Issued Capital Ordinary shares Rs. 100/= each		5,000
General reserve 01.01.2014		500
Profit and Loss account Balance 01.01.2014		150
15% Bank loan		200
Sales		6,000
<u>Provision for Depreciation 01.01.2014</u>		
Buildings		25
Office equipment		70
Motor vehicles		125
Accounts payable (Creditors)		180
Opening inventory (stock)	1,500	
Purchases	2,000	
Carriage inwards (of purchases)	300	
Land and buildings (buildings 500,000)	1,350	
Office equipment	200	
Motor vehicles	500	

Tax paid for the year	100	
Administrative expenses	900	
Selling and distribution expenses	800	
Financial expenses	50	
Balance at Bank	3,000	
Cash in hand	1,300	
Accounts receivable (Debtors)	250	
	<u>12,250</u>	<u>12,250</u>

You are informed that;

- Closing inventory (closing stock) is valued at Rs. 1,300,000/=
- Cashier has disappeared with cash Rs. 500,000/= on 31.12.2014. No entries in books or accounts.
- Depreciate
  - Buildings at 5% on cost
  - Office equipment 35% on cost
  - Motor vehicles 25% on cost
- 10% of debtors cannot be recovered; treat them as bad debts.
- Interest on 15% Bank loan has been paid and is included in Financial expenses.
- Taxation for the year Rs. 250,000/=
- Administrative expenses yet to be paid Rs. 100,000/=.
- Selling and distribution expenses overpaid Rs. 200,000/=
- Transfer Rs. 150,000/= to general reserve account
- This company deals with the purchase and sale of pharmaceutical products.
- 10% Ordinary Share dividend has been proposed by the Directors.

You are required to prepare an Income Statement (Trading and Profit and Loss account) for the year ended 31.12.2014 and a Financial Statement (Balance Sheet) as at 31.12.2014. (Notes to accounts to be given)

(20 Marks)

2. Suraj Limited produces 3 products P, Q and R. The Production and Sales for the next financial year and further information related to the production are given below;

Products	P	Q	R	
Production and Sales	4,000	5,000	3,000	Units each
Selling prices	Rs. 250/=	Rs. 300/=	Rs. 350/=	Per unit
<u>Variable expenses</u>	Rs	Rs	Rs	
Direct wages	80	90	100	Per unit
Direct materials	50	75	100	Per unit
Variable overheads	30	20	30	Per unit

Fixed overheads for the year Rs. 295,000/=

Material cost Rs. 25/= per kg.

- a) Calculate the following;
- Contribution per unit of each product
  - Total contribution for three products
  - Profit for the year.
- b) If only 29,000 kg of material would be available for the production, what is the best production mix to achieve the highest contribution and profit.

(20 Marks)

3. Lal, Nihal and Kamal were carrying on a pharmaceutical business. Their capital and current balances on 01.01.2014 were as follows;

	<u>Capital accounts balances</u>		<u>Current account balances</u>	
		Rs.		Rs.
Lal		500,000		50,000
Nihal		400,000		(40,000)
Kamal		300,000		30,000

Net profit of the business for the year ended on 31.12.2014 was Rs. 900,000/=.

As per partnership agreement, they are entitled to the following;

- No interest charge on Drawings.
- Interest on Capital 5%.
- Salaries to partners per month; Lal Rs 15,000/=, Nihal Rs 15,000/= and Kamal Rs 10,000/=
- Profit Sharing Ratio Lal, Nihal, Kamal 5:3:2.
- Partners drawings for the year are as follows. Lal Rs. 300,000/= Nihal Rs. 250,000/= and Kamal Rs. 200,000/=
- Partners later decided to share profits equally.

You are required to prepare the Appropriation Account and the Partners current account for the year ended 31.12.2014.

(20 Marks)

4. Readymade Garments Exports Ltd received a new order and as a result, they had to increase the production to meet the demand. The management proposed the following;
- Construction of a new factory building to accommodate additional staff or
  - Renting an additional factory or
  - Arrange another shift for the additional production.

The new order will continue for five years as per contracts signed.

The three proposals are forwarded for your observation and comments by the Board of Directors.

Prepare a suitable report to be considered by the Board members.

(20 Marks)

**PART B**

5. a) Using illustrations explain how the following policies influence the respective market outcome.
- i. The government introduces a maximum legal price on a kilo of rice, market for rice.
  - ii. Introduction of minimum legal wage, on the labour market.
  - iii. The government providing a subsidy on rice farmers, on the market for rice.
  - iv. The government imposing a tax on electrical items, on the market for electrical items.
- (12 Marks)
- b) i. What are the major determinants of Price Elasticity of Demand?  
ii. The value of Price Elasticity of Demand for good X is given as -0.48 and for good Y as -1.36, if the revenue earned from goods X and Y is to be increased, how should the prices of X and Y be changed? Explain using illustrations.
- (08 Marks)
6. Using illustrations explain whether you “agree” or “disagree” with the following statements.
- i. Perfectly Competitive firms are price makers.
  - ii. It is possible for the firms operating in a perfectly competitive market to make economic profit in the long run.
  - iii. A Monopolist is in a position to decide both the market price and output at the same time.
  - iv. The revenue maximizing output of a Monopolist is higher than the profit maximizing output.
  - v. Firms operating in Monopolistically Competitive markets can make economic profits only in the short run.
- (20 Marks)
7. a) What are the major Macro-Economic objectives of a country? Explain.
- (06 Marks)
- b) “It is the duty of the government to use the most appropriate policy mix to achieve the major Macro-Economic objectives of a country. However every country is compelled to make trade-offs in pursuing these Macro Objectives”
- i. What is meant by the most appropriate policy mix? Explain.
  - ii. Do you agree with the above statement? Explain taking Sri Lankan economy as an example.
- (14 Marks)

8. a) i. Using illustrations differentiate between “Demand Pull” and “Cost Push” inflation.  
ii. What are the negative effects of high inflation on the economy of a country?  
Explain.

(12 Marks)

- b) i. What factors create Frictional, Structural and Cyclical unemployment?  
ii. What are the measures that can be taken by a government to reduce the Frictional, Structural and Cyclical unemployment? Explain.

(08 Marks)

\*\*\*\*END OF QUESTION PAPER\*\*\*\*