THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

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SCHOOL OF ACCOUNTING AND BUSINESS
BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE PROGRAMME

YEAR I SEMESTER I (Group B)
END SEMESTER EXAMINATION – MARCH 2015

AFM 10230 Fundamentals of Management Accounting

Date	:	15th March 2015
Time	:	9.00 a.m. – 12.00 p.m.
Duration	:	Three (03) Hours

Instructions to Candidates:

- This paper consists of three sections (A, B and C).
- Answer **ALL** questions in **SECTION A**, **SECTION B** and **ANY FOUR (04)** questions from **SECTION C**.
- Please submit answers to Section A separately in the sheet given
- The marks for each question are shown in brackets.
- The total marks for the paper is 100.
- This is a closed book examination.
- Non programmable calculators are allowed.
- Answers should be written neatly and legibly.

SECTION A

Answer **ALL** Questions

Question No. 01

1. Identify which of the following statements is true in relation to relevant costs and irrelevant costs.
   a. Relevant costs are not specific to management's decisions and irrelevant costs are specific costs that the management will be highly concerned with.
   b. Opportunity cost is an example for relevant costs and sunk cost is an example for irrelevant costs.
   c. Relevant costs are measured in monetary terms whereas irrelevant costs cannot be identified in monetary terms.
   d. Relevant costs are often related to future activities and irrelevant costs are related to current manufacturing activities.

2. From among the following, what is ***not*** an example for "Cost Centre"?
   a. Quality control department.
   b. Marketing department.
   c. Student in a school.
   d. Packing section.

3. Lakmal sells Japanese pocket radios. The price of this radio is Rs. 600 per unit. Lakmal's annual holding cost rate is 22% per unit per annum. Ordering cost is Rs.70 per order. Demand for this pocket radio is expected to be constant with 20 units per month. What is the approximate Economic Order Quantity (EOQ)?
   a. 25 Units
   b. 16 Units
   c. 7 Units
   d. 5 Units

4. Which of the following statements best explains Management Accounting reports?
   a. Management Accounting reports are prepared in an ad-hoc manner for the use of shareholders.
   b. Management Accounting reports are based on past information and are without future directions.
   c. Internal parties such as Directors and Managers positioned at the top level of organizational hierarchy are the report recipients of Management Accounting.
   d. Management Accounting reports are based on Accounting standards and Accounting concepts stipulated by CA Sri Lanka.

5. Overhead costs of ABC Ltd for the month of June 2014 are as follows.
   i. Rates and Taxes Rs.5,000.
   ii. Depreciation of Plant & Machinery Rs.10,000.
   iii. Repair and Maintenance of Plant & Machinery Rs. 3,000.
   iv. Welfare expenses Rs.2,000.

   Select the most appropriate basis of allocation which can be applied for the respective overheads of i, ii, iii and iv respectively.
   a. Floor area occupied, plant & machinery value, machine hours, and number of employees.
   b. Plant & machinery value, machine hours, plant & machinery value, number of employees.
   c. Floor area occupied, machine hours, value of plant & machinery, and number of employees.
   d. Plant & machinery value, machine hours, number of employees, plant & machinery value.

6. From among the following figures related to component X, identify the Re-order Level and Maximum Stock level.

Maximum consumption per week	- 150 units
Average consumption per week	- 100 units
Minimum consumption per week	- 50 units
Lead time	- 8 to 12 weeks
Re-order quantity	- 800 Units

a. Re-order level = 1400 units; maximum stock level = 800 units
b. Re-order level = 1800 units; maximum stock level = 2200 units
c. Re-order level = 1800 units; maximum stock level = 800 units
d. Re-order level = 1400 units; maximum stock level = 2200 units

7. Identify the **incorrect** statement regarding the need for efficient stock management.
   a. An efficient storing process will ensure proper custody of all stocks to be issued.
   b. It increases the lead time and thereby increases safety stock level.
   c. If the storing process is efficient, it protects the stocks from thefts, deterioration, evaporation and pilferage.
   d. Maintaining a smooth and regular flow of stocks will reduce stock outs.

Questions No. 8 and 9 are on the information given below.

Nimal Brothers' Co.Ltd has three production departments, A, B and C and two service departments, X and Y.

Department	**A**	**B**	**C**	**X**	**Y**
Directly allocated Overheads (Rs.)	2,000	3,600	6,500	1,600	3,000

Overhead expenses which cannot be directly allocated;

- Rent & Rates Rs. 20,000
- Depreciation of Machinery Rs. 25,000

Details regarding basis of apportionment are as follows;

Department	**A**	**B**	**C**	**X**	**Y**
Floor space(sq.ft)	4,000	5,000	6,000	4,000	1,000
Horse power of machines	60	30	50	10	-
Value of machines (Rs)	60,000	80,000	100,000	5,000	5,000

8. What would be the total overhead cost relevant for production departments A, B, and C respectively?

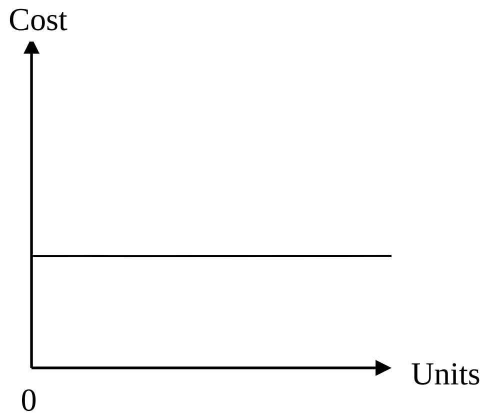
a. A - Rs. 10,400	B - Rs.14,300	C - Rs. 19,500
b. A - Rs. 8,400	B - Rs.10,700	C - Rs. 13,000
c. A - Rs. 12,000	B - Rs.16,600	C - Rs. 22,500
d. A - Rs. 2,400	B - Rs. 3,200	C - Rs. 4,000

9. What would be the total overhead costs relevant to Service departments X and Y respectively?

   a. X - Rs.6,200 Y - Rs.1,700
   b. X - Rs.7,800 Y - Rs.4,700
   c. X - Rs.6,000 Y - Rs.1,500
   d. X - Rs.6,100 Y - Rs.4,500

10. Araliya Enterprises needs to pay Rs. 500/- even at zero consumption of electricity units. Electricity bill for the month of April is Rs. 1,560/-. Which of the following is the most suitable graph to show the above scenario?

a)



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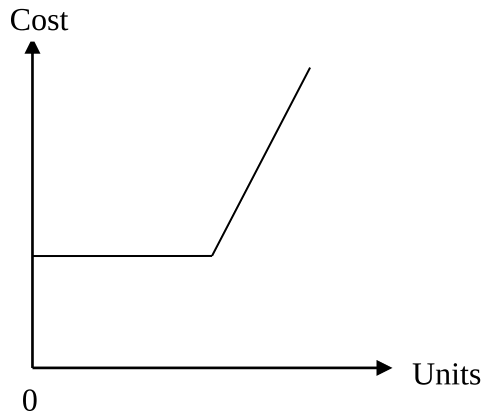
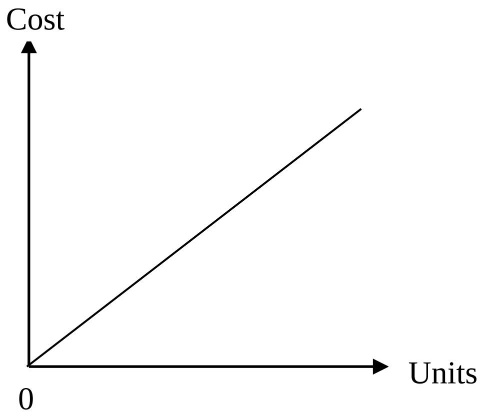


c)



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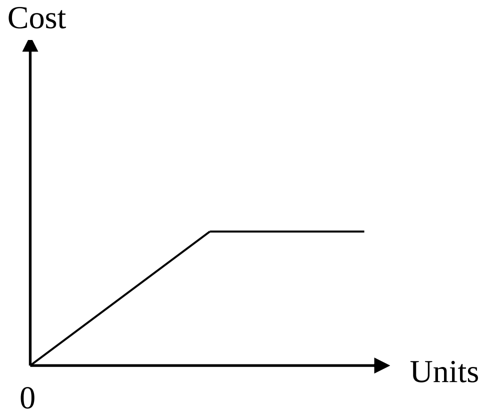

SECTION B

Answer **ALL** Questions

Question No. 02

a. ABC Ltd is a manufacturing company which produces televisions and it has three production departments, namely Cutting, Assembling, Packing and two service departments, Storing and Maintenance.

Overhead expenses which cannot be traced directly to the relevant departments are as follows:

Rent	Rs. 200,000
Rates	Rs. 25,000
Lighting	Rs. 60,000
Power	Rs. 40,000
Depreciation of machinery	Rs. 90,000
Welfare expenses of workers	Rs. 60,000

Overhead apportionment bases are given below:

Description	**Cutting**	**Assembling**	**Packing**	**Storing**	**Maintenance**
Floor space (sq. ft)	10,000	3,000	2,000	4,000	1,000
Light points	30	20	15	10	5
Machinery value (Rs.)	300,000	250,000	200,000	100,000	50,000
Number of workers	20	14	6	12	8
Horse power of machines (HP)	150	100	125	75	50
Motor vehicle value (Rs.)	500,000	400,000	500,000	300,000	200,000
Machine hours	200	100	50	-	-

The expenses for storing and maintenance are allocated as follows:

Description	**Cutting**	**Assembling**	**Packing**	**Storing**	**Maintenance**
Storing	30%	20%	30%	-	20%
Maintenance	40%	20%	30%	10%	-

Direct cost per television is given below:

- Direct material Rs. 20,000
- Direct labour Rs. 10,000
- Royalty Rs. 3,000

You are required to:

When televisions are manufactured, they pass through the three departments, Cutting, Assembling and Packing for three (3), two (2) and one (1) machine hours respectively.

i. Prepare a statement of overhead apportionment.

(06 Marks)

ii. Prepare a statement of overhead re- apportionment (Re-distribution) by using simultaneous equation method.

(04 Marks)

iii. Calculate cost per television.

(02 Marks)

iv. Calculate selling price of a television if the company is planning to keep 40% markup.

(01 Mark)

b. Answer the following

i. List the steps of the purchasing process.

(03 Marks)

ii. List two advantages and two disadvantages of centralized stores.

(02 Marks)

iii. Differentiate Financial Accounting and Management Accounting on following areas:

- Principle objective
- Time horizon

(02 Marks)

(Total 20 Marks)

SECTION C

Answer **ANY FOUR** Questions

Question No. 03

a. 'Discounting methods are more appropriate than non-discounting methods when appraising a project'. Discuss .

(03 Marks)

b. Sandagiri Enterprise is planning to invest on a new project and it has two options. You have been appointed the Management Accountant in the Company and you have been asked to evaluate the two options and give recommendations to the board of directors of the company.

Expected initial capital outflow is Rs. 1,000,000 and future cash inflows for both options are given below:

Year	Option 01 (Rs.)	Option 02 (Rs.)
1	500,000	450,000
2	400,000	420,000
3	200,000	400,000
4	350,000	300,000
5	150,000	175,000

Required rate of return is 15% per annum.

Discounting factors for 15% rate are given below.

Year	0	1	2	3	4	5
Discounting factor	1.000	0.869	0.756	0.657	0.571	0.497

You are required to;

i. Calculate payback period for both options and give recommendation on the answer.

(04 Marks)

ii. Calculate the Net Present Value (NPV) for both options and give recommendation on the answer.

(06 Marks)

iii. 'Accounting Rate of Return (ARR) is better than Internal Rate of Return (IRR)'. Comment on this statement.

(02 Marks)

(Total 15 Marks)

Question No. 04

a. Kalyana PLC is a manufacturing company which produces school bags as a single product.

The Company can sell one unit at Rs. 800/- and information on cost per unit is given below.

Cost	**Description**	**Amount (Rs.)**
Direct materials	2 meters @ Rs. 200	400/-
Direct labour	3 hours @ Rs.50	150/-
Variable overhead	1 hour @ Rs.50	50/-

Total fixed overhead is Rs. 800,000/- for the period, and the company can produce 10,000 school bags during the year at the maximum capacity.

Directors of the Company seek advice on short term decision making and you have been appointed as an advisor to the Company.

Provide answers for the following that have been raised by the Board of Directors.

i. Break-even point in unit terms

(02 Marks)

ii. Profit Volume ratio (P/V ratio)

(02 Marks)

iii. Sales value at the break-even point

(02 Marks)

iv. The number of units needed to be sold to earn a profit of Rs. 250,000 per annum.

(02 Marks)

v. Draw a traditional break even chart for the given information at the expected production level of 5,000 school bags and show the Margin of Safety in terms of units.

(03 Marks)

vi. The company now expects to increase the marginal cost upto Rs. 700 per unit and fixed costs to Rs. 900,000/- per annum. How many units need to be sold to earn the profit of Rs. 100,000 when the selling price remains unchanged?

(03 Marks)

b. List **two** assumptions of Cost Volume Profit (CVP) analysis.

(01 Mark)

(Total 15 Marks)

Question No. 05

a. Differentiate Marginal Costing and Absorption Costing.

(02 Marks)

b. Anuradha PLC produces toy cars and sells them for Rs. 500 per unit. There were no stocks at the end of December 2013 and other relevant information is given below:

	Rs.
Direct cost per unit:	
Direct Material	125
Direct wages	100
Variable production overhead	50

Budgeted and actual fixed overhead for the month of January 2014 are Rs. 500,000 and Rs. 450,000 respectively.

Variable selling expenses are 10% of the sales value.

The company has produced 5,000 units and sold 4500 units during the month of January.

Particulars	**Quantity**	**Actual value**
Direct Material	8000 Kg	Rs. 24,000
Direct Labour	12,000 Hours	Rs. 42,000
Variable Overhead	12,000 Hours	Rs. 24,000

You are required to:

i. Prepare a profit statement, using marginal costing for the month ended 31st January 2014.

(04 Marks)

ii. Prepare a statement of profit calculation using absorption costing for the month ended 31st January 2014.

(05 Marks)

iii. Reconcile the differences in the profit computed above i. and ii.

(02 Marks)

c. List **four** overhead absorption methods.

(02 Marks)

(Total 15 Marks)

Question No. 06

a. List the types of standards and briefly explain **two** of them.

(03 Marks)

b. A Ltd. has a manufacturing division which makes a product to which the following standard cost details are related.

Particulars		**Per unit cost**
Direct Material	5kg @ Rs. 2	Rs. 10
Direct Labour	7 Hours @ Rs. 3	Rs. 21
Variable Overhead	7 Hours @ Rs. 1	Rs.7

When output was 1,800 units, the following actual results were recorded:

Particulars	**Quantity**	**Actual value**
Direct Material	8000 Kg	Rs. 24,000
Direct Labour	12,000 Hours	Rs. 42,000
Variable Overhead	12,000 Hours	Rs. 24,000

Required;

Calculate following variances and indicate whether the variances are **favorable** or **adverse**.

i. Direct material price variance

(02 Marks)

ii. Direct material usage variance

(02 Marks)

iii. Direct labour rate variance

(02 Marks)

iv. Direct labour efficiency variance

(02 Marks)

v. Variable overhead efficiency variance

(02 Marks)

c. State **two** reasons for favorable material variance

(02 Marks)

(Total 15 Marks)

<u>Question 07</u>

a. List the key purpose of budgeting and budgeting control system.

(03 Marks)

b. List **four** major factors that should be considered when forecasting sales.

(02 Marks)

c. Nayana Ltd is planning to commence its trading on 1st January 2015. Its sales for the next four months will be as follows:

Month	**January**	**February**	**March**	**April**
Total sales (Rs.)	120,000	150,000	160,000	180,000

The company will sell the goods on credit basis and it will receive 50 % of the monthly sales value in cash in the month of sale itself, 30% in the following month and the balance 20 % two months later.

Material cost will be 60% of the value of company's sales. The company plans to purchase the required material for each month and half of the following month's production in order to ensure adequate of stocks. One month credit period is available for the company's suppliers.

Required;

Prepare a cash budget for the months of **February** and **March 2015** and which should clearly show the following;

i. Receipts from customers

(05 Marks)

ii. Payments to suppliers

(05 Marks)

(Total 15 Marks)

Question 08

a. Identify the most suitable pricing method for the following scenarios.

   i. Fashionable Footwear (Pvt) Ltd is a shoe manufacturing company and the shoes produced by the company is normally priced as Rs. 899.00, Rs.1499.00, Rs.1799.00 etc. This company thinks that a minor distinction in pricing can make a big difference in sales by reducing the effect of the actual pricing in the consumers' mind.

   (02 Marks)

   ii. Alpha Automobile (Pvt) Ltd is an automobile manufacturing company which is more concerned about achieving its pre-determined ROI ratio of 45% as its capital investment is high. The company sets the prices for its products in order to achieve this ROI ratio.

   (02 Marks)

   iii. Buzz Solutions Software (Pvt) Ltd is concerned about pricing its software as per the customers' perceived value of it and not on its costs of production or any other factor.

Thus the company is pricing its product at a value which is many times than the cost of the product.

(02 Marks)

b. Briefly discuss the following terms in relation to Stock Management. You may use examples to illustrate your understanding.

i. Re-Order Level

(02 Marks)

ii. Economic Order Quantity (EOQ)

(03 Marks)

iii. Maximum Stock Level

(02 Marks)

iv. Minimum Stock Level

(02 Marks)

(Total 15 Marks)