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THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

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

**YEAR I SEMESTER I – INTAKE VII (GROUP A)**
**END SEMESTER EXAMINATION – JANUARY 2017**

# AFM 10230 Fundamentals of Management Accounting

| | | |
|---|---|---|
| Date | : | 3rd February 2017 |
| Time | : | 9.00 a.m. - 12.00 p.m |
| Duration | : | Three (03) hours |

**Instructions to Candidates:**

- This paper consists of three parts (A, B and C).
- Part A – Answer **ALL** questions in the separate sheet provided

  Part B – **Question No. 02** is **Compulsory**

  Part C – Answer **Three (03)** Questions only
- The total marks for the paper is 100.
- The marks for each question are shown in brackets.
- Use of scientific calculator is allowed.
- Graph Sheets are provided on request.
- Answers should be written neatly and legibly

## Part A

Answer **ALL** questions

**<u>Question No. 01</u>**

1. Which of the following word DOES NOT describe a main focus of management accounting?
   a. Planning
   b. Control
   c. External
   d. Decision-making

2. CIMA defines management accounting as:
   "The application of the principles of accounting and financial management to create, protect, preserve and increase the value for the __________________ of for-profit and not-for profit enterprises in the public and private sectors".
   a. Auditors
   b. Stakeholders
   c. Owners
   d. Customers

3. Which of the following words complete the statement below?
   _____________ Accounts are prepared for external stakeholders. Management accounts are prepared for ______________ stakeholders.
   a. Shadow, Internal
   b. Financial, Internal
   c. Financial, External
   d. Internal, Budget

4. ABC absorbs fixed production overheads in one of its departments on the basis of machine hours. There were 100,000 budgeted machine hours for the forthcoming period. The fixed production overhead absorption rate was Rs. 2.50 per machine hour.

   During the period, the following actual results were recorded: Standard machine hours 110,000 fixed production overheads Rs. 300, 000.

   Which ONE of the following statements is correct?
   a. Overhead was Rs. 25,000 over-absorbed
   b. Overhead was Rs. 25,000 under-absorbed
   c. Overhead was Rs. 50,000 over-absorbed
   d. No under- or over-absorption occurred

5. Which ONE of the following costs would NOT be classified as a production overhead cost in a food processing company?
   a. The cost of renting the factory building
   b. The salary of the factory manager
   c. The depreciation of equipment located in the material store
   d. The cost of ingredients

6. A hospital's records show that the cost of carrying out health checks in the last five accounting periods have been as follows:

| Period | Number of patients seen | Total cost (Rs.) |
|---|---|---|
| 1 | 650 | 17,125 |
| 2 | 940 | 17,800 |
| 3 | 1260 | 18,650 |
| 4 | 990 | 17,980 |
| 5 | 1150 | 18,360 |

Using the high-low method and ignoring inflation, the estimated cost of carrying out health checks on 850 patients in period 6 is:

   a. Rs. 17,515
   b. Rs. 17,570
   c. Rs. 17,625
   d. Rs. 17,680

7. A company produces a single product that passes through two processes. The details for process 1 are as follows:

| | |
|---|---|
| Material input | 20,000 kg at Rs.2·50 per kg |
| Direct labour | Rs.15, 000 |
| Production overheads | 150% of direct labour |

Normal losses are 15% of input in process 1 and without further processing any losses can be sold as scrap for Rs.1 per kg.

The output for the period was 18,500 kg from process 1. There was no work-in-progress at the beginning or end of the period. What value (to the nearest Rs.) will be credited to the process 1 account in respect of the normal loss?

a. Nil
b. Rs. 3,000
c. Rs. 4,070
d. Rs. 5,250

8. W Ltd makes leather purses. It has drawn up the following budget for its next financial period: Selling price per unit is Rs.11.60 Variable production cost per unit is Rs. 3.40 Sales commission is 5% of selling price, fixed production cost is Rs.430, 500 Fixed selling and administration costs Rs. 198,150 Sales are 90,000 units.

The margin of safety represents

a. 5.6% of budgeted sales
b. 8.3% of budgeted sales
c. 11.6% of budgeted sales
d. 14.8% of budgeted sales

9. For decision-making purposes, which of the following are relevant costs?

    i. Avoidable cost
    ii. Future cost
    iii. Opportunity cost
    iv. Differential cost

a. (i), (ii), (iii) and (iv)
b. (ii) only
c. (ii) and (iii) only
d. (iv) only

10. The audit fee paid by a manufacturing company would be classified by that company as:
    a. A production overhead cost
    b. A selling and distribution cost
    c. A research and development cost
    d. An administration cost

**(Total 20 Marks)**

## PART B

**<u>Question No. 02</u> (Compulsory)**

Fine Line Company Ltd. is a manufacturing company which manufactures two products "X" and "Y". These product passes through two production departments namely "Machining" and "Finishing" and company has two supporting service departments "Maintenance" and "Canteen". Following information is available for the Fine Line Company Ltd for the year ended on 31st December 2016.

Assembly department is a machine intensive department while Finishing is a labour intensive department.

| | Assembly | Finishing | Maintenance | Canteen |
|---|---|---|---|---|
| Area (sq. meters) | 1000 | 2000 | 500 | 500 |
| KW hours consumed | 2750 | 4500 | 1975 | 775 |
| Machine value (Rs.) | 45,000 | 35,000 | 11,000 | 9,000 |
| Staff | 20 | 30 | 10 | 2 |
| **<u>Actual overheads allocated</u>** | | | | |
| -Indirect Material (Rs) | 7,000 | 8,000 | 3,000 | 2,000 |
| -Indirect Labour (Rs.) | 1,600 | 2,220 | 11,200 | 1,500 |

The following budgeted information was available as at 1st January 2016.

- Rent Rs.15,000
- Electricity Rs.10,000
- Machine depreciation Rs. 5,000
- Rates and taxes on premises Rs.15,000

Maintenance department cost is shared out among the other three departments as follows.

- Assembly 50%
- Finishing 40%
- Canteen 10%

The Canteen department's overheads are to be reapportioned on the basis of the number of employees in the other three departments.

Budgeted labour hours used in each department by each product is;

| | Machining | Assembly |
|---|---|---|
| Product X | 1 hr | 1 hr |
| Product Y | 2 hrs | 1/2 hr |

Budgeted machine hours used in each department by each product

| | Machining | Assembly |
|---|---|---|
| Product X | 3 hrs | 1 hr |
| Product Y | 4 hrs | 1/2 hr |

| Actual details | Product X | Product Y |
|---|---|---|
| Number of units to be produced | 10,000 | 12,000 |
| Direct Material cost (Rs) | 18,000 | 15,000 |
| Direct Labour cost (Rs) | 20,000 | 25,000 |

| | X | Y |
|---|---|---|
| **Actual machine hours** | | |
| Machining | 35,000 | 45,000 |
| **Actual labour hours** | | |
| Assembly | 12,000 | 8,000 |

**Required:**

a. Apportion the unallocated costs between the departments using the basis of apportionment that is most appropriate from the information given and determine the total overhead budget for each department.

(08 Marks)

b. Calculate the budgeted overhead absorption rates for each of the production departments using the most appropriate basis for recovery in each case

(04 Marks)

c. Calculate the cost per each products for Fine Line Company Ltd.

(04 Marks)

d. Find over/ under absorbed overhead cost for the given period.

(04 Marks)

**(Total 20 Marks)**

## PART C

Answer **Three (03)** Questions only

### Question No. 03

A. Define "process costing" and provide an example from the real scenario

(05 Marks)

B. Following information relates to **Process 2** of Beer Ltd for period 1.

Opening work in progress is 400 units**.** Following percentages of material, labour and overhead were completed during the previous period.

- Material (valued at Rs. 12,000) - 100%
- Labour (valued at Rs. 8,000) - 50%
- Overhead cost (valued at Rs. 6,000) - 40%

Material added during the period amounts to 9000 units and following costs were incurred during the period.

- Material Rs. 100,800
- Labour Rs. 83,500
- Overhead cost Rs. 94,100

Closing working Progress is 500 units

- Material 100% Complete
- Labour 50% Complete
- Overhead 40% Complete

**Required:**

i. Assuming the company uses the weighted average method for valuing work in progress, calculate the total cost of the finished goods for the period 1.

(10 Marks)

ii. Prepare Process 2 account for the Beer Ltd.

(05 Marks)

**(Total 20 Marks)**

**<u>Question No. 04</u>**

A. Define “Cost – Volume – Profit Analysis” and briefly explain its objective.

(05 Marks)

B. Jeewa Ltd produces a single item of product, Product “R” that is sold for Rs.20 per unit. You have been provided with the following information about ‘R’ for the forthcoming year: budged sales 10,000 units, variable costs Rs. 8 per unit. Budgeted fixed overheads amount to Rs.30, 000. The Finance Director has requested you to prepare documents for a presentation to the Board of Directors.

**Required:**

i. Calculate (i) breakeven point (ii) margin of safety (expressed as a percentage of budgeted sales)

(03 Marks)

ii. Construct a basic break even chart.

(03 Marks)

C. Tin Tin Ltd. produces and sells two products, Snoop and Haddock. Product Snoop is sold for Rs.7 per unit and has a total variable cost of Rs.2.94 per unit, while Product Haddock is sold for Rs.15 per unit and has a total variable cost of Rs.4.40 per unit. The marketing department has estimated that for every five units of Snoop is sold, one unit of Haddock will be sold. The organisation's total fixed cost per period is Rs.123, 600.

**Required:**

i. Calculate the breakeven sales revenue and quantity for each product

(5 Marks)

ii. Outline the limitations of break – even analysis.

(4 Marks)

**(Total 20 Marks)**

**<u>Question No. 05</u>**

Genuine Ltd. has been asked to quote a price for a one-off contract. The company's management accountant has asked for your advice on the relevant costs for the contract. The following information is available:

**Materials**

The contract requires 3,000 kg of material K, which is a material used regularly by the company in other production.

The company has 2,000 kg of material K currently in inventory which had been purchased last month for a total cost of Rs.19, 600. Since then the price per kilogram for material K has increased by 5%.

The contract also requires 200 kg of material L. There are 250 kg of material L in inventory which are not required for normal production. This material originally cost a total of Rs. 3, 125. If not used on this contract, the inventory of material L would be sold for Rs. 11 per kg.

**Labour**

The contract requires 800 hours of skilled labour. Skilled labourer is paid Rs. 9.50 per hour. There is a shortage of skilled labourer and all the available skilled labourers are fully employed in the company in the manufacture of product P.

The following information relates to product P:

| | Rs. Per unit | Rs. Per unit |
|---|---|---|
| Selling price | | 100 |
| Less: | | |
| Skilled labour | 38 | |
| Other variable costs | 22 | (60) |
| Contribution | | 40 |

**Depreciation**

Management accountant has estimated that the contract will take 20 weeks to complete. Depreciation charge of the equipment used is Rs. 50,000. This represents 20 weeks' straight line depreciation on the equipment used. If the equipment is not used on this job it will stand idle for the 20 week period. In either case its value at the end of the 20 week period will be identical.

**Marketing**

Prior to the offer received from the customer, the marketing executive has visited the client and made a demonstration presentation which had a cost of Rs.50, 000.

**Hire charge of equipment**

A special equipment has to be hired to complete the contract and this costs about Rs. 20,000

**Profit Mark up**

Genuine Ltd. has a policy of charging 20% profit margin when calculating the selling price for contracts.

**Required:**

a. Prepare a cost statement, using relevant costing principles, showing the minimum cost that Genuine Ltd should charge for the contract. Make detailed notes showing how each cost has been arrived at with explanations.

**(Total 20 Marks)**

**Question No. 06**

A. Body Shop is a cosmetic product manufacturer and following information relates to product X for the period 1.

| **Selling price per unit Rs.** | **Sales Quantity per month Units** |
|---|---|
| 100 | 1000 |
| 120 | 950 |

**Required:**

If price (P) and the quantity demanded (Q) assume to have a linear relationship,

i. Using the equation of a straight line ($P = a + bQ$) predict the quantity demanded per month if the selling price is Rs. 300.

(05 Marks)

ii. If marginal revenue = $a - 2bQ$, when the selling price $(P) = a + bQ$, calculate the profit maximizing selling price for product X. Assume that the variable cost for the product is Rs. 50 per unit.

(05 Marks)

B. Write short notes on the following with examples from the real scenario

i. Market penetration pricing

(05 Marks)

ii. Market skimming pricing

(05 Marks)

**(Total 20 Marks)**