# KASNEB

## CPA PART I SECTION 2

## MANAGEMENT ACCOUNTING

## PILOT PAPER

**September 2015.** **Time Allowed: 3 hours.**

**Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.**

**QUESTION ONE**

(a) New Colour Limited manufacturers two joint products Exe and Wye. A by product Zed is also produced. Output from Process One is transferred to Process Two where the joint products emerge. The following information is available for July 2015:

1. Process One cost data:

| | |
|---|---|
| Raw material inputs (40,000 kgs) | Sh.9,620,000 |
| Direct wages | Sh. 7,650,000 |
| Overheads | Sh. 11,050,00 |
| Output: | |
| Transferred to Process Two | 30,000 Kgs. |
| By product Zed | 2,000 Kgs. |
| Closing work in progress (50% complete as to conversion costs) | 8,000 Kgs. |

2. By product Zed retails at Sh.75 per kg. Additional selling costs amount to Sh.15 per kg. 500 kgs. were sold in July 2015.
3. Process Two cost data:

| | |
|---|---|
| Additional direct materials | Sh.3,852,500 |
| Direct wages | Sh.6,099,609.5 |
| Overheads | Sh.3,828,750 |
| Output: | |
| Finished goods (Exe and Wye) | 28,000 Kgs. |
| Losses in the process | 2,000 Kgs. |

4. The output is produced in the ratio of 2:3 for products Exe and Wye respectively.
5. Normal loss in the process is 2.5%. Scrap value per unit is Sh.200.
6. The selling price per unit of each product is as follows:

| | |
|---|---|
| Exe | Sh.2,000 per Kg. |
| Wye | Sh.1,218.75 per Kg. |

7. Joint costs are allocated on the basis of sales revenue at separation point.

**Required:**

(i) Statement of production for Process One. (8 marks)

(ii) Process Two account. (8 marks)

(b) In the context of service costing, explain the main features of a service. (4 marks)

**(Total: 20 marks)**

**QUESTION TWO**

(a) Explain six requirements of an effective budgetary control system. (6 marks)

(b) A limited company operates a system of standard costing. The following information is available for the month of July 2015:

1. Actual cost data:

| | Sh. |
|---|---|
| Direct materials purchased (36000 Kgs.) | 1,890,000 |
| Direct wages (6800 hours) | 2,210,000 |
| Variable production overheads | 620,000 |
| Fixed production overheads | 1,880,000 |

2. Output during the period was 3500 units of product Y.
3. The standard production units were budgeted at 4800 units.
4. The standard cost data per unit is as follows:

| | Sh. |
|---|---|
| Direct materials purchased (Sh.500 per Kg.) | 500 |
| Direct wages (2 hours) | 600 |
| Variable production overheads | 200 |
| Fixed production overheads | 400 |
| | 1700 |

5. Labour records show 6200 hours were worked. 600 hours were recorded as idle time due to machine breakdown.

**Required:**

(i) Direct material cost, price and usage variance. (4 marks)

(ii) Labour cost, rate, efficiency and idle time variance. (6 marks)

(iii) Variable overheads cost variance. (2 marks)

(iv) Fixed overhead expenditure variance. (2 marks)

**(Total: 20 marks)**

**QUESTION THREE**

(a) Explain four ways in which a company could achieve cost reduction. (4 marks)

(b) Distinguish between "cost centre", "profit centre" and "investment centre". (6 marks)

(c) Explain the term "balanced scorecard". (2 marks)

(d) Describe four perspectives of balanced scorecard giving two measures of performance that could be used. (8 marks)

**(Total: 20 marks)**

**QUESTION FOUR**

(a) Alpha Limited manufactures three products in two production departments; machining and finishing. It also has two service departments, a canteen and machine maintenance departments. The following are the budgeted cost data for the coming year:

| **Department** | **Machining** | **Finishing** | **Canteen** | **Maintenance** |
|---|---|---|---|---|
| Allocated overheads (Sh.) | 3,502,000 | 1,748,000 | 800,000 | 400,000 |
| No. of employees | 15 | 9 | 2 | 6 |
| Maintenance orders | 52 | 13 | - | - |
| Products | Benta | Centa | Denta | |
| Production (units) | 3000 | 4500 | 2000 | |
| Direct material cost per unit (Sh.) | 120 | 150 | 170 | |
| Direct labour hours per unit: | | | | |
| Machining (Sh.60 per hour) | 3 | 2 | 1.5 | |
| Finishing (Sh.50 per hour) | 4 | 2 | 2 | |
| Machine hour per unit: | | | | |
| Machining | 2 | 4 | 3 | |

Overheads are absorbed on machine hours in machining and labour hour in finishing.

**Required:**

Calculate the budgeted cost per unit for each product. (14 marks)

(b) The finishing department of a factory has the following payroll data for the month of August 2015:

| | Direct employees | Indirect employees |
|---|---|---|
| Total attendance time | 19800 hours | 7050 hours |
| Normal working hours | 18000 hours | 6400 hours |
| Productive time | 18850 hours | - |
| Non productive time | | |
| - Due to poor supervision | 400 hours | - |
| - Normal machine repairs | 550 hours | - |
| Basic hourly rate per hour | Sh.150 | Sh.150 |

Overtime is paid at a premium of 40% of base rate. 40% of the overtime for both categories was worked to meet specific request of a customer. A general bonus of Sh.625,000 was paid to all the employees.

**Required:**
Wages control account to show the wages allocation for the period. (6 marks)
**(Total: 20 marks)**

**QUESTION FIVE**
Omega Manufacturers Limited has just acquired new production facilities to produce product Omega. The product will be produced in two departments, crushing and filtering.

**Additional information:**
1. The product will retail at a price of Sh.500 per litre.
2. Variable production costs are as follows:

| | Crushing | Filtering |
|---|---|---|
| Direct materials | Sh. 50 | - |
| Direct labour | Sh.150 | Sh.40 |
| Variable production overheads | Sh. 40 | Sh.20 |

3. Fixed production overheads amount to Sh.5,000,000 for both departments.
4. The Crushing department is currently operating at full capacity with available labour hours being 10,000.
5. Each unit of Omega requires 0.25 hours in the Crushing department.

**Required:**
(a) (i) Break-even point in units and revenue. (4 marks)
(ii) Margin of safety in units. (2 marks)
(iii) Current budgeted profit. (2 marks)

(b) A customer has offered to purchase 2000 units of product Alpha, another product that Omega Manufacturers Limited can produce with the new production facility:

Cost data is as follows for product Alpha:
(i) Cost per unit

| | Crushing | Filtering |
|---|---|---|
| Direct materials | Sh. 250 | - |
| Direct labour | Sh. 300 | Sh.80 |
| Variable production overheads | Sh. 50 | Sh.20 |

(ii) Each unit of Alpha requires 0.5 hours in crushing department.
(iii) The customer has offered a price of Sh.1500 per unit of Alpha.
(iv) Incremental fixed costs associated with the offer amount to Sh.1,000,000.

**Required:**
Advise the company on whether to accept the offer. (6 marks)

(c) The management is considering a proposal to establish a new market in a neighbouring country for product Omega. This will require expansion of the production facility.

The proposal will increase costs as follows:

| | |
|---|---|
| Advertising expenses | 10% of revenue. |
| Travelling expenses | 10% of prime cost. |
| Fixed production overheads | Sh.2,500,000 |

Target annual sales volume will be 10,000 units in the new market at a price of Sh.900 per unit.

**Required:**
Advise the company on whether it should market product Omega in the new country. (6 marks)
**(Total: 20 marks)**

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