



# MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BANKING, ACCOUNTING & FINANCE

FOURTH YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF COMMERCE

BAC 404: COST ACCOUNTING II

DATE: 26/7/2019

TIME: 8.30-10.30 AM

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## INSTRUCTIONS:

- i. Answer question one and any other two questions.
- ii. Marks allocated for each question are shown at the end of the question.
- iii. Show your working where necessary.

- Q1. (a) Amdany Ltd uses a part branded “Maxi” whose demand tends to be constant at an annual rate of 4.4 million units. The cost per unit for this part is sh. 220 and the cost of placing an order is sh. 550. Amdany Ltd estimates that the annual inventory carrying cost of the part expressed as a percentage of cost of average inventory is 20%.

**Required:**

- i) Compute the Economic Order Quantity (EOQ) (3 marks)
- ii) Compute the annual number of orders. (2 marks)
- (b) Fixed costs are actually variable costs. With reference to this statement explain whether you agree or disagree. Give reasons. (3 marks).
- (c) Outline THREE features of Job Costing. (3 marks)
- (d) Explain THREE possible causes of differences between reported profits in cost accounting and financial accounting under the non- integrated cost accounting system. (6 marks)
- (e) A production process has joint costs of Sh. 12,000 for the input of 1000 kilograms of material. Two products are produced from this:  
Product A: 600 kgs. Selling price = Sh. 25 per unit. Separate costs = Sh. 4,000  
Product B: 400 kgs. Selling price = Sh. 40 per unit. Separate costs = Sh. 7,000  
**Required:** Calculate the inventory value of the production using;

- i) Weight to apportion the joint costs (3 marks)
- ii) Net realizable value to apportion the joint costs (3 marks)
- (f) The following information relates to Brutes Ltd which manufactures a single type of chemical. Overhead processing costs for the last eight months are as follows.

| Month | Machine Hours | Overhead Costs (Sh. “000”) |
|-------|---------------|----------------------------|
| 1     | 10,600        | 120                        |
| 2     | 17,000        | 180                        |
| 3     | 4,000         | 70                         |
| 4     | 21,000        | 184                        |
| 5     | 19,000        | 178                        |
| 6     | 7,800         | 100                        |
| 7     | 14,000        | 172                        |
| 8     | 12,000        | 154                        |

**Required:** Equation in the form of  $Y = a + bX$  using the Regression method. (7 marks)

- Q2. (a) Kobo bearings Ltd is committed to supply 24,000 bearings per annum to Deluxe fans on a steady daily basis. It is estimated that it costs sh. 10 as inventory holding cost per bearing per month and that the set up cost per run of bearing manufacture is sh. 3240.

**Required:**

- i) Economic Batch Quantity (EBQ) (2 marks)
- ii) Minimum Inventory Cost per annum. (2 marks)
- (b) Discuss FIVE factors to be considered before introducing machines accounting department of an organization. (10 marks)
- (c) Differentiate between the following sets of terms. Give ONE example in each case.
- i) Cost center and profit center (2 marks)
- ii) Direct labour cost and indirect labour cost (2 marks)
- iii) Prime cost and manufacturing overheads (2 marks)

- Q3. Clayworks Ltd is a manufacture of earthware products. The products undergo two processes A and B. The following information relates to process A for the month of September 2017.

|                                  | Process A  |
|----------------------------------|------------|
| Opening Work in Progress (units) | 10,000     |
| Stage of completion              | 2/5        |
| Material cost (Sh.)              | 6,000,000  |
| Conversion cost (Sh.)            | 1,500,000  |
| Units started in the period      | 40,000     |
| Material cost in the month       | 22,600,000 |
| Conversion cost in the month     | 18,000,000 |

|                                  |               |
|----------------------------------|---------------|
| Units completed in the month     | 44,000        |
| Closing Work in Progress (units) | 2000          |
| Stage of completion              | $\frac{1}{2}$ |

**Additional information:**

Conversion costs are applied uniformly throughout the process

Normal loss is 5% of total units to be accounted for.

Scrap value of normal loss is Sh. 250 per unit.

**Required:**

- a) Statement of equivalent units (6 marks)
- b) Statement of cost (4 marks)
- c) Statement of valuation (4 marks)
- d) Process A account (6 marks)

Q4. (a) Biashara Ltd maintains separate cost and financial accounts. In the financial accounts for the three months ended 31<sup>st</sup> October 2013, the manufacturing, trading and profit and loss accounts were as follows:

|                        |                |                     |
|------------------------|----------------|---------------------|
| Raw materials :        | Sh. "000"      | Sh. "000"           |
| Opening stock          |                | 976                 |
| Purchases              |                | <u>2,160</u>        |
|                        |                | 3,136               |
| Closing stock          |                | <u>(1,040)</u>      |
| Raw materials consumed |                | 2,096               |
| Direct wages           | 804            |                     |
| Production overheads   | <u>1,218</u>   | <u>2,022</u>        |
| Production cost        |                | 4,118               |
| Work in Progress:      |                |                     |
| Opening                | 1280           |                     |
| Closing                | <u>1,160</u>   | <u>120</u>          |
| Cost of goods produced |                | 4,238               |
| Sales                  |                | 8,800               |
| Opening stock          | 2,400          |                     |
| Cost of goods produced | <u>4,238</u>   |                     |
|                        | 6,638          |                     |
| Closing stock          | <u>(2,438)</u> |                     |
| Cost of goods sold     |                | <u>4,200</u>        |
| <b>Gross profit</b>    |                | <b><u>4,600</u></b> |

The following information was extracted from the cost accounting system:

| Control account balances | 1 August 2013 | 31 October 2013 |
|--------------------------|---------------|-----------------|
|                          | Sh. "000"     | Sh. "000"       |
| Raw materials stores     | 990           | 1022            |

|                                                                        |      |        |
|------------------------------------------------------------------------|------|--------|
| Work in progress                                                       | 1202 | 1139.4 |
| Finished goods                                                         | 2268 | 2516   |
| Production overheads amounted to sh. 1,487,400                         |      |        |
| The profit as per the cost accounting system amounted to sh. 4,566,000 |      |        |

**Required:** A statement reconciling the cost accounting profit with the financial accounting profit. (14 marks)

- (b) State and explain THREE causes of losses in process costing. (6 marks)
- Q5. (a) Explain three differences between job costing and batch costing. (6 marks)
- (b) Smarta limited manufactures flower pots for sale. The company does not carry any stock of finished goods as it manufactures specifically to customers' orders. However the company holds a range of raw materials in the stores.

The following information relates to the company's operations for the months of August and September 2012.

1. As at 31 August 2012, there were two incomplete jobs in progress whose details were as follows.

|                   | Job J14 | Job J15 |
|-------------------|---------|---------|
| Direct materials  | 2500    | 1444    |
| Direct labour     | 1640    | 1200    |
| Factory overheads | 3230    | 2400    |

2. During the month of September 2012, the company accepted three more jobs; J16, J17 and J18 and incurred additional costs as follows

|                           | Job J14 | Job J15 | Job J16 | Job J17 | Job J18 |
|---------------------------|---------|---------|---------|---------|---------|
| Direct materials issued   | 840     | 1396    | 3800    | 2442    | 1032    |
| Direct materials returned | 240     | -       | 140     | -       | -       |
| Direct labour             | 520     | 780     | 3120    | 1510    | 580     |

3. During the month of September 2012, direct materials worth sh. 200 were transferred from job J14 to job J16
4. During the month of September 2012 job J14, J15 and J16 were completed.
5. The factory production overheads are absorbed at the rate of 200% of direct labour cost
6. On completion of a job, the company adds 20% to the total factory production cost in order to recover its selling ,distribution and administrative costs

7. The amounts invoiced to customers during the month of September 2012. Were as follows;

|                         | Job J14 | Job J15 | Job J16 |
|-------------------------|---------|---------|---------|
| Amount invoiced<br>(Sh) | 12500   | 12000   | 15800   |

**Required:**

- i) Compute the total costs for the work done as at September 2012.
- ii) Compute the profit or loss for the jobs completed and invoiced to customers as at 30 September 2012 (14 marks)