# MACHAKOS UNIVERSITY

**University Examinations for 2018/2019 Academic Year**

**SCHOOL OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF BANKING, ACCOUNTING & FINANCE**

**SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR**

**DIPLOMA IN ACCOUNTANCY**

**DACC 203 MANAGERIAL ACCOUNTING**

**DATE: 24/7/2019** **TIME: 2.00-4.0 PM**

**INSTRUCTIONS:**

Attempt Question One and any other Two Questions

**QUESTION ONE (30 MARKS)**

a) The following data relate to a given stock item:

| | |
|---|---|
| Normal usage | 1,300 per day |
| Minimum usage | 900 per day |
| Maximum usage | 2,000 per day |
| Lead time | 15-20 days |
| EOQ | 30,000 |

Calculate the various control levels. (6 marks)

b) Explain the advantages and the disadvantages of the periodic review system of inventory control. (6 marks)

c) Explain the assumptions of the EOQ. (4 marks)

d) The following data have been collected regarding sales and advertising expenditure.

| Sales (Ksh.) | Advertising expenditure (Ksh.000) |
|---|---|
| 8.5 | 210 |
| 9.2 | 250 |
| 7.9 | 290 |
| 8.6 | 330 |

| | |
|---|---|
| 9.4 | 370 |
| 10.1 | 410 |

Calculate r and interpret. (10 marks)

e) Explain the features of capital expenditure decisions. (4 marks)

**QUESTION TWO (20 MARKS)**

A firm produces two products, X and Y, with a contribution of Sh.8 and Sh.10 per unit respectively.

| **Product** | **Labour hours** | **Material A** | **Material B** |
|---|---|---|---|
| X | 3 | 4 | 6 |
| Y | 5 | 2 | 8 |
| Total available | 500 | 350 | 800 |

a) Formulate the linear programming model. 8marks
b) Solve the model using graphical method. 12marks

**QUESTION THREE (20MARKS)**

a) Explain the causes of unfavourable labour Efficiency variance.

b) The standard cost for a production system in a given model is as follows:

| Inputs | Std.Qty | Std price | std cost limit |
|---|---|---|---|
| Materials | 3kg | Sh.4.00 | Sh.2.00 |
| Direct labour | 2.5 Hours | Sh.14.00 | Sh.35.00 |
| Variable Overheads | 2.5 Hours | Sh.3.00 | Sh.7.50 |

During the month 6,500 kg of raw materials were purchased at Sh.3.80 per kg and all the material was used to produce 2000 units of finished products. 4,500 hours of direct labour time were used at a total cost of Sh.64,350. The actual variable overhead cost was Sh.13,950.

**Required:**

Compute the following variances:

i. Materials price variance.

ii. Materials efficiency (usage) variance.

iii. Total materials variance.

iv. Labour rate variance.

v. Labour efficiency variance.

vi. Total labour variance

vii. Variable overhead rate variance.

viii. Variable overhead efficiency variance.

**QUESTION FOUR (20 MARKS)**

The following was extracted from the books of KK Ltd, a company which started trading one year ago.

| **MONTH- 2014** | **SALES(shs.000)** | **PURCHASES(shs.000)** |
|---|---|---|
| April | 150 | 100 |
| May | 160 | 110 |
| June | 160 | 90 |
| July | 170 | 90 |
| August | 200 | 80 |
| September | 200 | 130 |
| October | 180 | 140 |
| November | 180 | 60 |
| December | 200 | 60 |

The following information is also available:

1. Cash in hand at the end of May 2014 will be Shs.180,000
2. 60% of the sales proceeds are received in the current month, 30% in the following month and the balance is received two months after sale.
3. Suppliers are paid one month after delivery of goods.
4. Corporation tax for the previous year amounting to shs.20,000 will be paid on 30$^{th}$ September 2014.
5. Contractor's retention money amounting to Shs.50,000 will be paid on 30$^{th}$ June 2014.
6. In October 2014, the company is due to receive Shs.20,000 as compensation for a civil suit.

7. The monthly administration expenses amounting to Shs.33,000 include factory depreciation charge of shs.4,000 and preliminary expenses of Shs.3,000.
8. office equipment worth Shs.13,000 will be paid for in November 2014.

**REQUIRED:** Prepare a cash budget for the period 1st June to 31st December2014.

**QUESTION FIVE (20 MARKS)**

a) Explain the main reasons for capital rationing? (4 marks)

b) A company has 4 independent projects which have the following information:

| **Project** | **Initial cost** | **Present Value of Cash Inflows** |
|---|---|---|
| A | Shs.35m | Shs. 53m |
| B | Shs.40m | Shs. 63m |
| C | Shs.65m | Shs. 103m |
| D | Shs. 48m | Shs.80m |

Additional Information:

i. The company has a capital limitation of Shs.100m. the cost of capital is 10% and any surplus funds can be invested at 12% p.a return on investment in perpetuity.
ii. All the projects are indivisible.

**Required:**

Determine the optimal project combinations. (16 marks)