



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BANKING, ACCOUNTING & FINANCE

**SECOND YEAR SECOND SEMESTER EXAMINATION FOR
BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT**

BAC 300: MANAGEMENT ACCOUNTING

DATE: 29/4/2019

TIME: 8.30-10.30 AM

INSTRUCTIONS: Attempt Question One and any other Two Questions

QUESTION ONE (COMPULSORY) (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)

- i. Records levels
- ii. Minimal stock level
- iii. Maximum stock level

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 (Y.)	Advertising expenditure (X)
8.5	210
9.2	250
7.9	290
8.6	330
9.4	370
10.1	410

calculate r and interpret the variance and standard deviation and comment. (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

- i) Formulate the linear programming model. (8 marks)
- ii) Solve the model using graphical method. (12 marks)

QUESTION THREE (20MARKS)

- a) Explain the causes of unfavorable 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:

- a) Cash in hand at the end of May 2014 will be Shs.180,000
- b) 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.
- c) Suppliers are paid one month after delivery of goods.

- d) Corporation tax for the previous year amounting to shs.20,000 will be paid on 30th September 2014.
- e) Contractor's retention money amounting to Shs.50,000 will be paid on 30th June 2014.
- f) In October 2014, the company is due to receive Shs.20,000 as compensation for a civil suit.
- g) The monthly administration expenses amounting to Shs.33,000 include factory depreciation charge of shs.4,000 and preliminary expenses of Shs.3,000.
- h) 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 December 2014.

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)