

**JARAMOGI OGINGA ODINGA UNIVERSITY**  
**SCHOOL OF BUSINESS AND ECONOMICS**  
**APRIL 2014 SEMESTER EXAMINATION**  
**BBM: 3421: AUDITING THEORY AND PRACTICE.**

**TIME:**

**2HOURS**

**INSTRUCTIONS: Answer question 1 and any other two.**

1.      a) List the five fundamental principles of auditing (5mks)
- b.) Give two examples of the work done by an internal auditor (6mks)
- c.) State any five advantages of vouching (5mks)
- d.) Highlight any five contents of an audit report (5mks)
- e.) State four uses of computer audit programs (4mks)
- f.) Enumerate five areas where conflict of interest may occur in auditing (5mks)
  
2. It is important that auditor independence is beyond question and that he should behave with integrity and objectives in all professional and business situations. The following are a series of questions which were asked by auditors at a recent update seminar on professional ethics.
  - (a.) Can I audit my brothers company? (4mks)
  - (b.) A and B and CO. the previous auditors will not give my firm professional clearance or the usual handover information because they are still owed fees. Should I accept the client's offer of appointment? (5mks)
  - (c.) Can I prepare the financial statement of a public a company and still remain as auditor? (4mks)
  - (d.)My client has threatened to sue the firm for negligence. Can I still continue to act as auditor? (5mks)
  - (e.) I am a student of the Chartered Association of Certified Accountant. Am I bound by the ethical guidelines of the Association? (2mks)

Required:

Discuss the answers you would give to the above question posed by the auditor. (20mks)

3. a) Explain how the laptop computer assist the auditors in their audit assignment (10mks)  
b.) A fixed asset register is a statutory book required to be maintained by the company at its head office in ensuring for an agreement with the companies Act requirement. Identify and explain any five types of information provided in this register (10mks)
4. a) A complete check of all the transactions and balances of a business is no longer required of an auditor. Explain five reasons for this. (10mks)  
b.) State and explain five professional qualities of an auditor (10mks)
5. a) Briefly state the advantages and disadvantages of following audit programmes which rely on traditional judgment sampling. (10mks)  
b.) Explain the five main stages of an audit. (10mks)

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**APRIL 2014 SEMESTER EXAMS**

**ABA: 205: MANAGEMENT MATHEMATICS**

**TIME**

**2HOURS**

**Instructions: Answer Question 1 and any other two**

1. a) Solve the following simultaneous equation by using matrix algebra

$$5x + 9y = -30$$

$$6x - 2y = 28$$

(4mks)

b.) Two manufacturers x and y are competing with each other in a very restricted market. The state transition matrix for the market summarizes the probability that customers will move from one manufacturer to the other in any one month. Interpret the state transition matrix in term of

From	To	
	X	Y
X	0.7	0.3
Y	0.1	0.9

i.) Retention and loss (4mks)

ii.) Retention and gain (4mks)

c.) Obtain the input –output coefficients for the following input –out put table of a certain agricultural economy in a certain year (figure in million shillings). Interpret the table clearly using Leontief model; obtain the gross outputs of the three sectors to meet the final demand (6mks)

From (output)	To(input) Fertilizer	Cattle	grain	Intersectoral demand	Final demand	Total demand or total output
Fertilizer	2	20	5	27	30	57
Cattle	10	120	20	150	200	350
Grain	4	30	19	53	100	153
Intersectoral Input	16	170	44	230	-	-
Primary	41	180	109	-	330	-

input						
Total input	57	350	153	-	-	560

A factory produces four products A, B, C and D which earns contributions of £20, £25, £12 and £30 per unit respectively. The factory employs 500 workers who work a 40 hour week. The hours required for each product and the material requirements are set out below

	Product			
	A	B	C	D
Hours per unit	6	4	2	5
Kgs material x per unit	2	8.3	5	9
Kgs material y per unit	10	4	8	2
Kgs material z per unit	1.5	-	2	8

The total availability of material per week is

X            100,000kgs

Y            65,000kgs

Z            220,000kgs

The company wishes to maximize contribution, formulate the L.P problem in the standard manner (5mks)

e.) work out: (i)  $\lim_{x \rightarrow 2} \frac{x^3 - 1}{2x^2}$

(3mks)

(ii) Differentiate

$F(x) = \frac{(3x^2-5)}{(1-x^3)}$  (4mks)

2. a) Find the values of  $x_1, x_2$  and  $x_3$  from the following three equations by using matrix algebra  
(10mks)

$$2x_1 + 4x_2 + x_3 = 8$$

$$3x_1 + 3x_2 + x_3 = 16$$

$$3x_1 + x_2 + 2x_3 = 8$$

b.) A firm produces two products x and y with contribution of £8 and £10 per unit respectively. Production data are: (per unit)

	Labour hours	Material A	Material B
X	3	4	6
Y	5	2	8
Table available	500	350	800

- i) Formulate the L.P model in the standard manner. (4mks)
- ii) Solve the model in (i) above using graphical method (3mks)
- iii) Calculate the shadow prices of the binding constraints and interpret. (3mks)

3. a) The following table gives the input-output coefficients for a three sector economy consisting of Agriculture industry and services.

Input-output coefficients

From	To		
	Agriculture	Industry	Series
Agriculture	0.3	0.5	0.2
Industry	0.2	0.0	0.5
Series	0.1	0.3	0.1

The project forecast demand for the three sectors are 100, 40 and 50 million shillings ( the coefficient matrix is given in terms of money ) .Determine what gross outputs of the three sectors will meet demand . (10mks)

b.) Find the following:

i)  $\int (4x^2 + 1/2x^{-3})dx$  (3 marks)

ii)  $\int (x^{3/4} + 3/7x^{-1/2} + x^5)dx$  (3 marks)

iii) find the product of matrix A and B when (4 marks)

$$A = \begin{pmatrix} 1 & 2 & 3 \\ 6 & 2 & 5 \end{pmatrix} \quad \text{and} \quad B = \begin{pmatrix} 0 & 1 & 2 \\ 4 & 0 & 3 \\ -1 & 3 & 5 \end{pmatrix}$$

4.) A chemical manufacturer process two chemicals, Arkon and zenon, in varying proportion to produce three products; A, B and C. He wishes to produce at least 150 units of A, 200 units of B and 60 units of C. Each ton of Arkon yields 3 of A, 5 of B and 3 of C. Each ton of zenon yields 5 of A, 5 of B and 1 of C.

If Arkon costs £40 per ton and zenon £50 per ton advice the manufacturer how to minimize his cost. (20mks)

5.) A state civic organization is conducting its annual fund – raising campaign for its summer camp program for the disadvantaged. Campaign expenditure will be incurred at a rate of \$10,000 per day. From past experience it is known that contribution will be high during the early stages of the campaign and will tend to fall off as the campaign continues. The function describing the rate at which contributions are received is

$$C(t) = -100t^2 + 20,000$$

Where t represents the day of the campaign and (t) equals the rate at which contribution are received, measured in dollar per day. The organization wishes to maximize the net proceeds from the camping.

- a) Determine how long the campaign should be conducted in order to maximize net proceeds. (5 marks)
- b) What is total campaign expenditures expected to equal? (5 marks)
- c) What are total contributions expected to equal? (5 marks)
- d) What are the net proceeds (total contributions less total expenditure) to equal? (5 marks)