



150

*(Knowledge for Development)*

## **KIBABII UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**ACADEMIC YEAR**

**FIRST YEAR FIRST SEMESTER**

**MAIN EXAMINATION**

**FOR THE DEGREES OF BACHELOR OF EDUCATION ARTS  
AND BACHELOR OF EDUCATION SCIENCE**

**COURSE CODE: ESM 104**

**COURSE TITLE: QUANTITATIVE SKILLS II**

**DATE: 10/1/2018**

**TIME: 9.00-11.00 a.m.**

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### **INSTRUCTIONS TO CANDIDATES**

Answer Question One and any other TWO (2) Questions

TIME: 2 Hours

This Paper Consists of 2 Printed Pages. Please Turn Over. ►

### Question 1

- a) An amount of money was deposited in a bank for 5 years at 4.5% p.a compound interest. If it amounted to 100,000/= after the 5 years, find the amount that was deposited initially. (4mks)
- b) Briefly explain the difference between customs duty tax and income tax. (4mks)
- c) In a Geometric Progression, the 4<sup>th</sup> term is 120, the 6<sup>th</sup> term is 480, find the
- i) Common ratio. (2mks)
- ii) The first term and (2mks)
- iii) The sum of the first ten terms of the series. (3mks)
- d) i) State any **three** factors considered in determining depreciation? (3mks)
- ii) Calculate the annual depreciation of a car that costs 2.4million with an estimated residual value of 200,000/= and an estimated life of 20 years. (2mks)
- e) Briefly explain the difference between current assets and fixed assets giving two examples of each. (5mks)

### Question 2

On 1<sup>st</sup> of January 2010, R.N. Jane started a business with a capital of 1.5 million shilling which she put into the business bank account.

On 3<sup>rd</sup> January, she paid by cheque 600,000/= for the business premises.

On 4<sup>th</sup> January, she purchased cement from Midland Emporium worth 300,000/= on credit.

On 6<sup>th</sup> January, she sold some cement to John Mark worth 180,000/= on credit.

On 9<sup>th</sup> January, she paid by cheque the 300,000/= to Midland Emporium.

On 15<sup>th</sup> January, John Mark returned two bags of cement worth 6,000/= to R.N Jane and paid cash for the rest.

On 20<sup>th</sup> January, R.N Jane sold for cash cement worth 90,000/=.

On 22<sup>nd</sup> January, she purchased more cement from Midland Emporium worth 360,000/= and paid by cheque.

On 25<sup>th</sup> January, she sold cement for cash worth 240,000/=.

On 30<sup>th</sup> January, she returned to Midland Emporium cement worth 45,000/=.

- a) Enter the transactions of R.N Jane into ledger accounts. (10mks)
- b) Extract a trial balance as at 31<sup>st</sup> of January 2010. (5mks)

c) State any **five** errors that may not be disclosed by the trial balance (5mks)

### **Question 3**

An employee in a certain firm drew the following earnings per month.

Basic salary Ksh.140,000/=, House allowance Ksh 90,000/=, Car allowance Ksh 40,000/=, Entertainment allowance Ksh 22,000/=, Responsibility allowance Ksh 35,000/=, Telephone allowance Ksh 8,000/=, In the month of April 2014, he made the following contributions: 6% of basic salary to a registered pension scheme, 11% of basic salary to the bank for a loan he took, 8% of house allowance to NHIF and 90% of car allowance to a motor spares shop for spares he had taken to repair his car. If he is entitled to Ksh 15,500 tax relief. Calculate:-

a) His annual gross income. (3mks)

b) His annual taxable income (3mks)

Using the following tax schedule,

#### **Tax Schedule**

Monthly Income (Kshs.)	Tax Rate
First Kshs. 10,164	10%
On the next Kshs. 9576	15%
On the next Kshs. 9576	20%
On the next Kshs. 9576	25%
Excess and over Kshs. 38,892	30%

Calculate;

c) His monthly income tax (7mks)

d) Total monthly deductions. (5mks)

e) Monthly net income. (2mks)

### **Question 4**

The following table shows amount paid and quantities of commodities sold daily at Shianda market for the years 2012 and 2013.

Commodity	2012		2013	
	Qty (Kg)	Amount(Kshs)	Qty (Kg)	Amount(Kshs)
Maize	80	7,200	270	12,150
Beans	80	6,000	82	6,560
Potatoes	72	4,176	60	3,540
Tomatoes	48	5,760	52	6,500
Onions	65	9,750	66	10,560

Using 2012 as the base year, calculate:

- a) Lespeyres price index (5mks)
- b) Paasche's price index (5mks)
- c) Fisher's ideal index (5mks)
- d) Marshall- Edgeworths index (3mks)
- e) State **two** reasons why Paasche price index is most preferred (2marks)

**Question 5**

- a) State any **four** internal sources of government revenue in Kenya. (4mks)
- b) Describe any **four** functions of the Nairobi Stock Exchange (NSE) market in the growth of Kenya's economy. (8mks)
- c) Briefly explain any **five** reasons why the Kenya government finds it necessary to budget for its finances. (5mks)
  - a) What is "Balance of Payments" and when is it said to be in equilibrium? (3mks)