UGANDA MARTYRS UNIVERSITY

NKOZI

UNIVERSITY EXAMINATIONS

FACULTY OF SCIENCE

DAPARTMENT OF ECONOMICS

END OF SEMESTER TWO FINAL ASESSMENT

National Income Accounts

STA 3203

DATE: Friday, April 29, 2016

TIME: 09:30AM – 12:30PM

Instructions:

1. Answer **FOUR** questions only
2. Do not write anything on the questions paper.
3. Carefully read through ALL the questions before attempting.
4. No **names** should be written anywhere on the examination book.
5. Ensure your work is **clear** and **readable**. Untidy work shall be penalized.
6. Any type of examination Malpractice will lead to automatic disqualification.
7. Ensure that your **ID number** is indicated on all pages of the examination answer booklet.

Question One

(a) Explain the difference between the following concepts as used in National Income Accounts

    (i)   Visible trade and Invisible trade   *(04marks)*

    (ii)   Paasche price index and Laspeyres price index   *(04marks)*

    (iii) Free on Board (F.O.B) and, Cost Insurance and Freight (C.I.F) (04Marks)

(b) Suppose that from 2009 to 2015 the export price index of Uganda rose from 100 to 160 (Index 2009 = 100) and the import price index rose from 100 to 140. Calculate Uganda's Terms of Trade (TOT) in 2009 and 2015, and explain your results.   *(05marks)*

(c) Explain four (04) determinants of Terms of Trade in Uganda's economy.

                                                (08marks)

Question Two

(a) The following data were compiled about an economy showing its economic transactions with the rest of the world in a given year. The data are in millions of shillings.

A. Current Account

Imports 13,698; Exports 7,710; Freight and Insurance Cr. 786, Dr. 64; Other Transportation Cr. 1,630, Dr. 374; Travel Cr. 1,302, Dr. 226; Investment Income Cr. 380, Dr. 1,820; Government Transactions Cr. 214, Dr. 352; Other Services and Income Cr. 432, Dr. 328; Private Unrequited Transfers Cr. 278, Dr. 198; Official Unrequited Transfers Cr. 652, Dr. 50.

B. Capital Account

Private Long-term Cr. 1,606, Dr. 56; Government Long-term Cr. 2,262, Dr. ___; Government Corporations Cr. ___, Dr. 22; Short – Term Cr. 1,546, Dr. 260.

C. Monetary Flows

Change in official Gross Reserves Dr. 2,056; Use of Fund Credit Cr. 541; Change in other liabilities Cr. 32; Counterpart to SDR Allocations Cr. 69.

Required: Assemble the data into a meaningful **Balance of Payment (BOP) statement** and interpret its major parts and salient features to a non-statistician interested policy maker.   *(25marks)*

Question Three

(a) Define the following terms as applied to National Income Accounts

    (i)   Trade Accounts   *(05marks)*

    (ii) Balance of payments   *(05marks)*

(b) Explain the three (03) approaches used in determining National Income.

                                                                     (15marks)

Question Four

(a) Explain the input-output transactions analysis of national income accounting.

                                                                     (07marks)

(b) The following relationship represents the input coefficient matrix and the specific final demand of development programs for an economy with three (03) industries.

$$A = \begin{pmatrix} 0.2 & 0.3 & 0.2 \\ 0.4 & 0.1 & 0.2 \\ 0.1 & 0.3 & 0.2 \end{pmatrix} \quad \text{and} \quad d = \begin{pmatrix} 10 \\ 5 \\ 6 \end{pmatrix} \text{Million dollars respectively;}$$

    (i)   Suppose the final demand for the three (03) industries increased by 20% each. Compute the final output for the three industries that would satisfy the increased final demand.   *(12marks)*

    (ii) Calculate the value of primary inputs required in production of output mix computed in (i) above.   *(06marks)*

Question Five

(a) Explain three (03) methods of presentation of national income accounts.

                                                                       (15marks)

(b) Given the following National Income model

    $Y = C + I_0$

    $C = a + bY$ $(a>0, 0<b<1)$

    (i)   List the endogenous and exogenous variables.   *(04marks)*

    (ii) Find the National Income, Y^* and Consumption expenditure, C^* by use of matrix inversion or Crammers rule method.   *(06marks)*

Question Six

(a) Outline four (04) reasons for compilation of Consumer Price Index (CPI) in Uganda. *(04marks)*

(b) The following details have been given, in value terms (i.e. millions of Ugandan Shillings) about the output of sectors A, M, and O of Uganda for the accounting period T.

Sector A
Value of intermediate output produced for use by:

Sector A:	Shs 4 million
Sector M:	Shs 20 million
Sector O:	Shs 6 million
Value of final output produced:	Shs 35 million
Imports:	Shs 2 million
Wages and Salaries:	Shs 22 million
Operating Surplus:	Shs 26 million

Sector M
Value of intermediate output produced for use by:

Sector A:	Shs 3 million
Sector M:	Shs 9 million
Sector O:	Shs 13 million
Value of final output produced:	Shs 50 million
Imports:	Shs 5 million
Wages and Salaries:	Shs 18 million
Operating Surplus:	Shs 12 million

Sector O
Value of intermediate output produced for use by:

Sector A:	Shs 8 million
Sector M:	Shs 11 million
Sector O:	Shs 1 million
Value of final output produced:	Shs 25 million
Imports:	Shs 3 million
Wages and Salaries:	Shs 14 million
Operating Surplus:	Shs 8 million

(i) Represent the above information into an input-output table. *(12marks)*

(ii) Compute the value of Domestic Product (DP), Domestic Income (DI) and Value Added (VA) for Uganda's economy. *(09marks)*

END