## חAmIBIA UПIVERSITY

OF SCIEПCE AMD TECHTOLOGY
FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF ACCOUNTING, ECONOMICS AND FINANCE

| QUALIFICATION: BACHELOR OF ECONOMICS |  |
| :--- | :--- |
| QUALIFICATION CODE: O7BECO | LEVEL: 7 |
| COURSE CODE: IMA612S | COURSE NAME: INTERMEDIATE MACROECONOMICS |
| SESSION: NOVEMBER 2019 | PAPER: THEORY |
| DURATION: 3 HOURS | MARKS: 100 |


| FIRST OPPORTUNITY EXAMINATION QUESTION PAPER |  |
| :--- | :--- | :--- |
| EXAMINER(S) | MS. NN SHITENGA $\quad$ Mr. P. NANGULA MS. K. MACKENZIE |
|  | MS. L. HOFNI |

## INSTRUCTIONS

1. This paper consist of section $A$ and $B$
2. Answer ALL questions.
3. Number your answers in accordance with the question paper.
4. Start each section Answer on a new page
5. Write clearly and legibly

## PERMISSIBLE MATERIALS

1. Pen
2. Ruler
3. Calculator

THIS QUESTION PAPER CONSISTS OF _6_PAGES (Including this front page)

## SECTION A: MULTIPLE CHOICE QUESTIONS

## Question 1

Please read the following scenario and answer questions 1 to 4 below
Scenario: Real GDP: Suppose that in year 1, an economy produces 100 golf balls that sell for $\$ 3$ each and 75 pizzas that sell for $\$ 8$ each. The next year the economy produces 110 golf balls that sell for $\$ 3.25$ each and 80 pizzas that sell for $\$ 9$ each.

1. (Scenario: Real GDP )The growth rate of nominal GDP from year 1 to year 2 is:
A. $19.72 \%$.
B. $10 \%$.
C. $7.8 \%$.
D. $8.8 \%$.
2. (Scenario: Real GDP )Using year 1 as the base year, real GDP in year 2 is:
A. $\mathrm{N} \$ 900$.
B. $\mathrm{N} \$ 970$.
C. $N \$ 1,000$.
D. $\mathrm{N} \$ 1,077.50$
3. (Scenario: Real GDP )The value of nominal GDP in years 1 and 2 respectively is:
A. $\mathrm{N} \$ 180,000 ; \mathrm{N} \$ 257,400$.
B. $\mathrm{N} \$ 900 ; \mathrm{N} \$ 990$.
C. $\mathrm{N} \$ 900 ; \mathrm{N} \$ 1,077.50$.
D. $\mathrm{N} \$ 1,000 ; \mathrm{N} \$ 1,005$.
4. (Scenario: Real GDP ) Using year 1 as the base year, the growth rate of real GDP from year 1 to Year 2 is (use the In formula)
A. $10 \%$.
B. $8.8 \%$.
C. $19.7 \%$.
D. $7.78 \%$.
5. $C=1,000+0.5 Y d ., I=500-100 i+0.3 Y ; G=300 ; T=200 ;(M / P) d=0.2 Y-$ $5,000 i ;(\mathrm{M} / \mathrm{P}) \mathrm{s}=1,000$. What is the equation for the IS curve?
A. $\quad Y=4,000-1,000$ i
B. $Y=5,000-500 \mathrm{i}$.
C. $\quad Y=6,500-250 \mathrm{i}$.
D. $Y=8,500-500 \mathrm{i}$.
6. Consider the model in question 5. The equilibrium output level equals
$\qquad$ and the equilibrium interest rate equals $\qquad$ .
A. $N \$ 8,447,10.6 \%$.
B. $\mathrm{N} \$ 8436,12.8 \%$.
C. $\mathrm{N} \$ 8,425,11.5 \%$.
D. $\mathrm{N} \$ 8,431,13.7 \%$.
7. If the economy is on the LM curve but not on the IS curve, then we know that
A. The good market is in equilibrium, but not the money market.
B. The money market and goods market are in equilibrium, but not the bond market.
C. The money, bond and goods markets are all in equilibrium;
D. The money market and bond markets are in equilibrium, but not the goods market
8. After a contractionary or expansionary fiscal policy,
A. The LM curve shifts and we move along the IS curve.
B. Neither the IS nor the LM curve shifts.
C. The LM curve shifts; the IS curve may or may not shift depending on the actions of the central bank.
D. The IS curve shifts and we move along the LM curve
9. The IS curve illustrates that when income increases,
A. Interest rate must rise to restore equilibrium in the goods market.
B. Interest rate must fall to restore equilibrium in the asset market.
C. Interest rate must rise to restore equilibrium in the asset market.
D. Interest rate must fall to restore equilibrium in the goods market.
10. Suppose $C=360-200 r+0.1 \mathrm{Y}, \mathrm{I}=120-400 \mathrm{r}, \mathrm{G}=120$, (M/P) $\mathrm{d}=100+0.2 \mathrm{Y}-$ 2000 r, Assume that $M=300, P=2.0$. What is the equation for the Money Market?
A. $Y=5,000+25,000 \mathrm{r}$.
B. $Y=8,000+25,000 i$.
C. $Y=250+10,000 \mathrm{i}$.
D. $Y=250+10,000 r$.
11. Consider the consumption function: $\mathrm{C}=\mathrm{a}+\mathrm{bY}$. An increase in consumer confidence in the economy will result in?
A. An increase in $Y$
B. An increase a
C. None of the above
D. An increase in $b$
12. Consider the consumption function: $\mathrm{C}=\mathrm{a}+\mathrm{bY}$. If b (the marginal propensity to consume) $=0.75$, this means that?
A. For every N\$ 1 increase in income, consumers spend 25 c
B. For every $\mathrm{N} \$ 1$ increase in income, consumers spend $\mathrm{N} \$ 1$
C. None of the above For every N\$ 1 increase in income
D. For every $\mathrm{N} \$ 1$ increase in income, consumers spend 75 c
13. If the MPC > 1 , this means that?
A. Consumers are spending more than they are saving
B. Consumers are spending and saving in equal amounts
C. Consumers are spending and using credit in equal amounts
D. Consumers are incurring credit for spending purposes

Suppose that Republic of Economists produces two goods: books and magazines. The following table provides information about the prices and output for these two goods for the years 2013, 2014 and 2015.

|  | 2013 | 2014 |  | 2015 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | P | Q | P | Q | P | Q |
| Books | $\$ 30$ | 900 | $\$ 31$ | 1,000 | $\$ 36$ | 1,050 |
| Magazine | $\$ 100$ | 192 | $\$ 102$ | 200 | $\$ 100$ | 205 |

a) Compute nominal GDP in each year.(6 Marks) 2015
b) Compute real GDP in each year using 2006 as the base year. ( 6 Marks)
c) compute the GDP deflator in each year and inflation rate from 2013 to 2014, and from 2014 to 2015 and comment on the Republics of Economists economic performance over period under review ( 8 marks)

## QUESTION 2

Assume that the economy is open and with government, Investment, government spending and exports are autonomous. Consumption and Import are directly related to disposable income and while Tax is, only lump sum. The price level and interest rate are held constant. The following variables relate to the economy:

| Variable | Value in billions (N\$) |
| :--- | :--- |
| Investment | 200 |
| Government spending | 200 |
| Lump-sum tax | 150 |
| Autonomous consumption | 100 |
| Marginal propensity to consume | 0.7 |
| Exports | 150 |
| Autonomous Imports | 50 |
| Marginal propensity to import | 0.3 |

a) Calculate the equilibrium level of national income (Y) using the injections = withdrawals (leakages) method. Show all workings. (7 marks)
b) Determine the balance of the government budget in equilibrium, state if it is a surplus / deficit and the amount. (4 marks)
c) Determine what the balance of trade is in equilibrium and state if it is a surplus / deficit, and the amount.(4 marks)
d) From the information above, illustrate the Keynesian cross diagram of this economy? (5 marks)

## QUESTION 3

Consider the following short-run model of open economy with following information

$$
\begin{gathered}
C=50+0.9 y d \\
I=150-5 i \\
G=100, \text { subsidies to farmers }=100 \\
T=100, X=20, M=10+0.1 Y \\
\left(\frac{M}{P}\right) d=0.2 Y-10 i
\end{gathered}
$$

$$
M s=100, \text { Unemployment allowance }=100
$$

a) State the IS and LM equations
(8 Marks)
b) Find the short-run equilibrium interest rate and output level
( 6 Marks )
c) Represent the short-run equilibrium interest rate and output level graphically (4 Marks)
d) What are the general equilibrium levels of Consumption, Investment and the level of terms of trade? (6 Marks)

## QUESTION 4

Economic growth can be defined as an increase in a country's productive capacity, identifiable by sustained rise in real national income over a period of years, Most influential economists have developed models in an attempt to explain the concept of economic growth;
a) With an aid of a formula, explain the role and relevance of Harrod-Domar growth model in any country's economic growth (10 marks)

100 MARKS

Student number: $\qquad$
Name of lecturer:

## ANSWER SHEET FOR SECTION A

Mark the correct answer with an X .

|  | A | B | C | D |
| :---: | :--- | :--- | :--- | :--- |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |
| 8 |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |
| 12 |  |  |  |  |
| 13 |  |  |  |  |
| 12 |  |  |  |  |

