ECS1601 (488923)   May/June 2014
REC1601 (474040)

ECONOMICS IB

Duration   2 Hours   100 Marks

EXAMINERS
  FIRST   MR WJ LE ROUX
  SECOND   MISS O MACKETT

Use of a non-programmable pocket calculator is permissible

Closed book examination

This examination question paper remains the property of the University of South Africa and may not be removed from the examination venue

This partial fill-in paper consists of 17 pages plus instructions for the completion of a mark-reading sheet

Read the following instructions **CAREFULLY** before answering the paper

The paper is divided into two sections Section A and Section B

SECTION A

Candidates must answer **ALL** the questions in this section

SECTION B

In this section ALL the questions must be answered on the mark-reading sheet which is supplied.
Carefully follow the instructions for the completion of the mark-reading sheet

Please ensure that you use the correct unique number on the mark-reading sheet
If you are registered for ECS1601, use the unique number 488923
If you are registered for REC1601, use the unique number 474040

As your mark-reading sheet can get lost, you MUST also write down your answers for this section On the last page of this paper space is provided for this purpose

SECTION A [50 MARKS]

Answer **ALL** the following questions in the blocks provided

Question 1

In the circular flow of income and spending between firms and households, there are three leakages or withdrawals, imports are one such leakage Name the other two   (2)

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Question 2

Name two market-orientated monetary policy instruments   (2)

Question 3

What are the criteria for a good tax? Name three criteria's and explain one briefly   (4)

Question 4

There are two countries, Alfa and Beta They can only produce cars and bicycles The following tables show their production of these two goods

Alfa	200 cars or 1200 bicycles
Beta	200 cars or 1400 bicycles

The president of Alfa wants to trade cars with Beta and asks you if Alfa has an absolute or comparative advantage in the production of cars?   (1)

Question 5

Name two types of lags that slows down the impact of monetary and fiscal policy   (2)

Question 6

Shortly describe the main differences between consumer price index (CPI) and production price
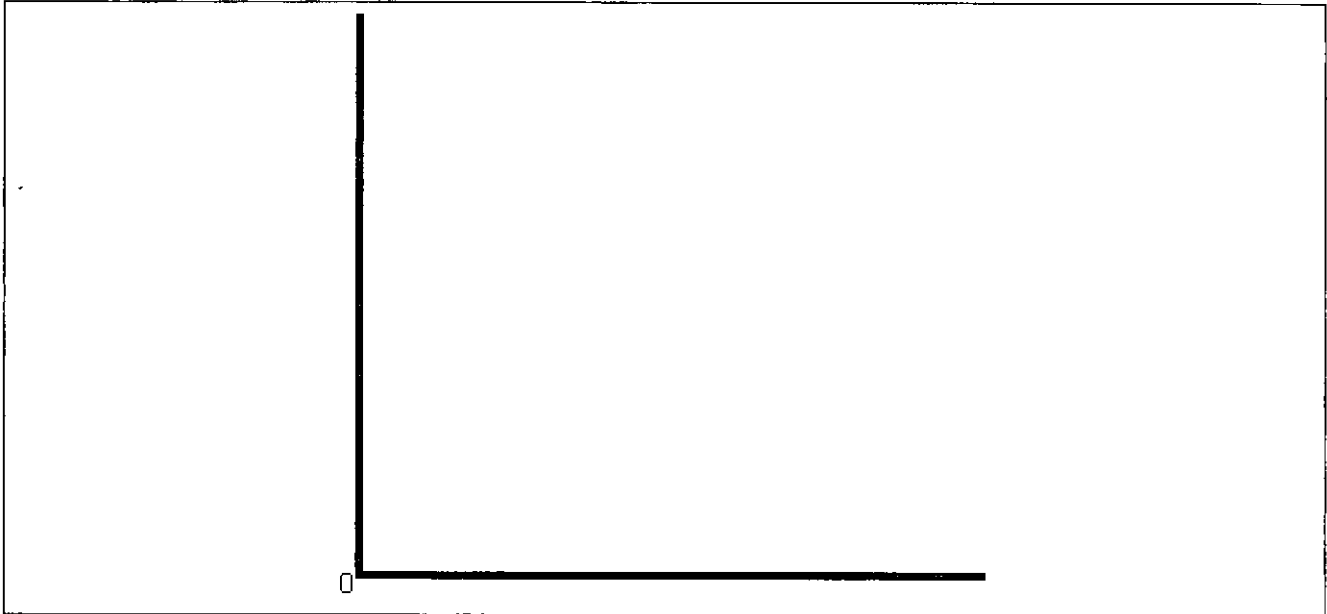index (PPI)   (2)

Question 7

In a country with a population of 75 million people there are 19 million children under the age of
15 years, 26 million employed, 8 million pensioners, 6 million unemployed and 1 million full time
students What is the unemployment rate?   (2)

Question 8

8 1   Use the following diagram to draw an example of the Phillips Curve   (3)

8 2   Show on the diagram above with a line marked S, an example of stagflation   (1)

8 3   Which public institution is responsible to keep inflation under control?   (1)

Question 9

The president of Neverland gave you the following information about the economy of Neverland Show all formulas and calculations

$C = 900 + 0,8Y$

$\bar{I} = 300$

$\bar{G} = 400$

$T = 0,25Y$

9 1   Calculate the multiplier for the economy of Neverland Give the answer in two decimals   (2)
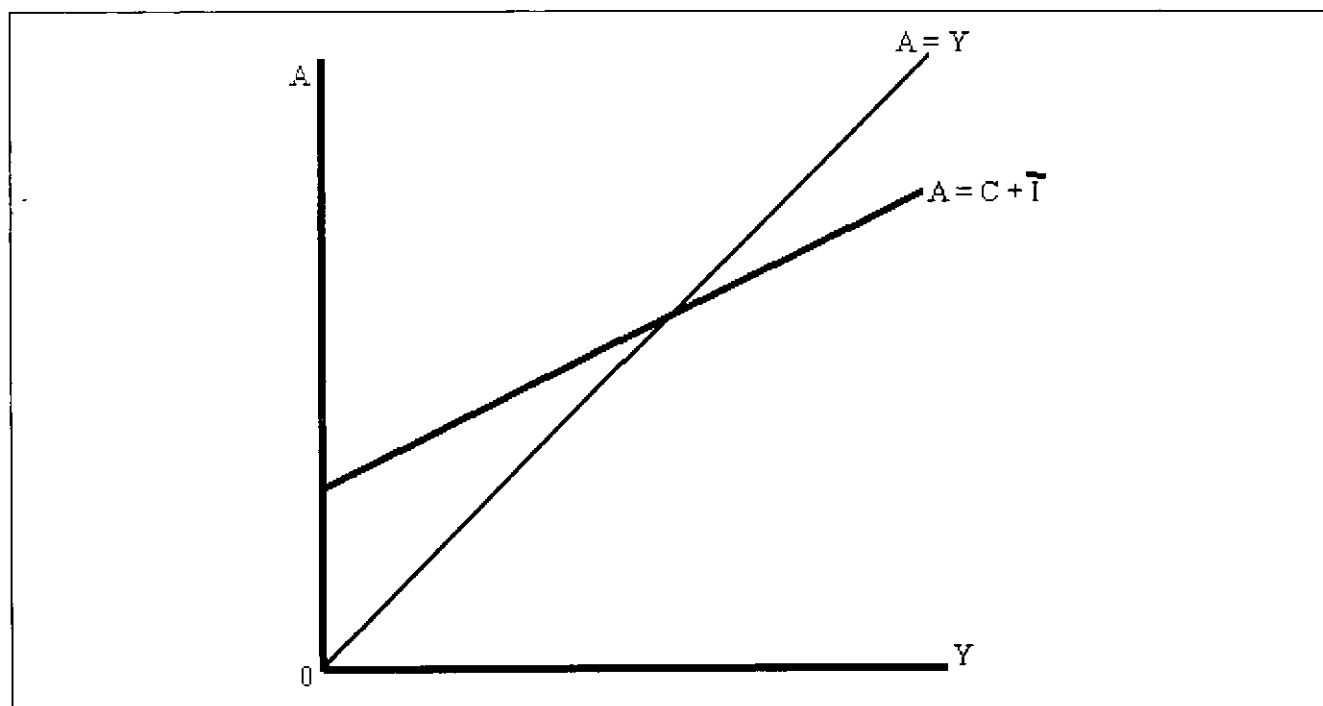
9 2   Calculate the equilibrium income of Neverland   (3)

9 3   Calculate the fiscal surplus or deficit of Neverland   (2)

Question 10

Examine the following graph and use it to answer the following questions

10 1 Show on the above graph where equilibrium is by indicating it with a dot marked "E1" (1)

10 2 After this country elects a government, government expenditure increases from zero Show what will happen to the Aggregate Spending line, name the new line "A2" (1)

10 3 Show where the new equilibrium is by indicating it with a dot marked "E2" (1)

10 4 The government decides they need to implement a proportional income tax Show what will happen to the aggregate spending line (name the new line "A3") And show the new equilibrium with a dot marked "E3" (2)

Question 11

Make use of the table below, showing the CPI for South Africa for 2012 and 2013, to answer the following questions

	2012	2013
January	95 2	100 3
February	95 7	101 3
March	96 8	102 5
April	97 2	102 9
May	97 2	102 6

June	97 5	102 9
July	97 8	104 0
August	98 0	104 3
September	98 9	104 8
October	99 5	105 0
November	99 8	105 3
December	100	105 5
Average for the year	97 8	103 5

11 1   Sandi had an income of R10 206 per month in April 2012, in April 2013 she has an income
       of R 11 320 per month Did Sandi's nominal income increase? And if so by how much?   (1)

11 2   Did Sandi's real income increase? And if so by how much? Only give the Rand value, do
       not round the cents up   (2)

Question 12

Suppose that an economy produces 3 goods Their quantities produced for 2000, 2007 and 2012 are
shown in the table below

	2000 (base year)		2007		2012	
Product	Quantity	Price	Quantity	Price	Quantity	Price
Hotdogs	100	R5	150	R10	170	R17
Pizzas	50	R15	100	R25	95	R30
Hamburgers	230	R10	250	R15	260	R22

[TURN OVER]

12 1 Calculate the nominal gross domestic product (GDP) for 2007 and 2012   (2)

12 2 Calculate real GDP for 2007 and 2012   (2)

12 3 Will there be a difference in the real and nominal GDP for the year 2000? Explain   (2)

Question 13

During the recession of 2009, countries were confronted with lower output and high unemployment
Therefore, authorities of monetary and fiscal policy decided to enforce expansionary policy

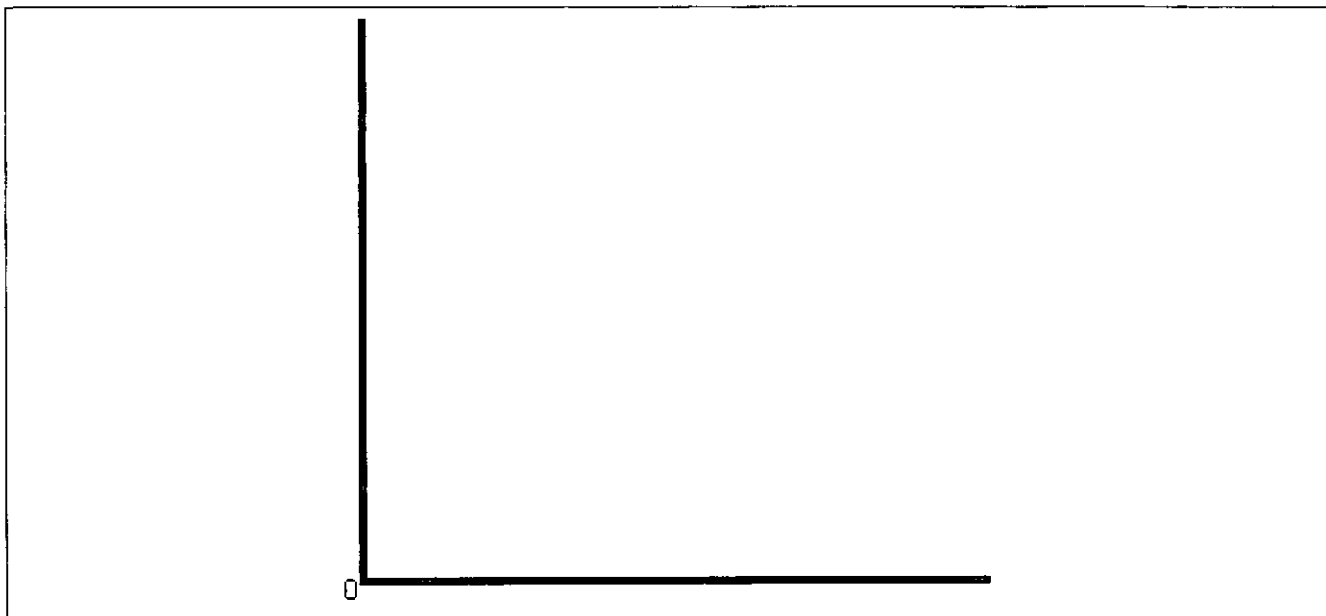13 1 Explain the term expansionary fiscal policy shortly   (3)

13 2 Explain the term expansionary monetary policy shortly   (3)

13 3 Show on the graph below what the effect of expansionary fiscal and monetary policy will
      have on the economy Indicate any movements of the AD and AS curves and show any
      changes in equilibrium price level and output   (3)

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SECTION B [50 MARKS]

Answer ALL the questions in this section on the mark-reading sheet which is supplied Each question is
worth 1¼ marks Note Only ONE statement per question is correct

1   A decline in disposable income

      [1]   increases consumption by moving upward along a specific consumption schedule
      [2]   decreases consumption because it shifts the consumption schedule downward
      [3]   decreases consumption by moving downward along a specific consumption schedule
      [4]   increases consumption because it shifts the consumption schedule upward
      [5]   has no effect on consumption

2   In the aggregate expenditures model, the

      [1]   marginal propensity to consume (MPC) is greater than zero, but less than one
      [2]   MPC and average propensity to consume (APC) are equal at the point where the consumption
             schedule intersects the 45-degree line
      [3]   average propensity to save (APS) is positive at all income levels
      [4]   MPC is equal to or greater than one at all income levels
      [5]   MPC − marginal propensity to save (MPS) = 1

3   The MPC for an economy is

      [1]   the slope of the consumption schedule or line
      [2]   the slope of the savings schedule or line
      [3]   1 divided by the slope of the consumption schedule or line
      [4]   1 divided by the slope of the savings schedule or line
      [5]   it always has a 45 degree slope

                                                                              [TURN OVER]

4   In contrast to the investment schedule, the consumption schedule is

     [1]   relatively stable
     [2]   relatively unstable
     [3]   downward sloping
     [4]   horizontal
     [5]   vertical

5   The following diagram shows the consumption schedules for economies A and B
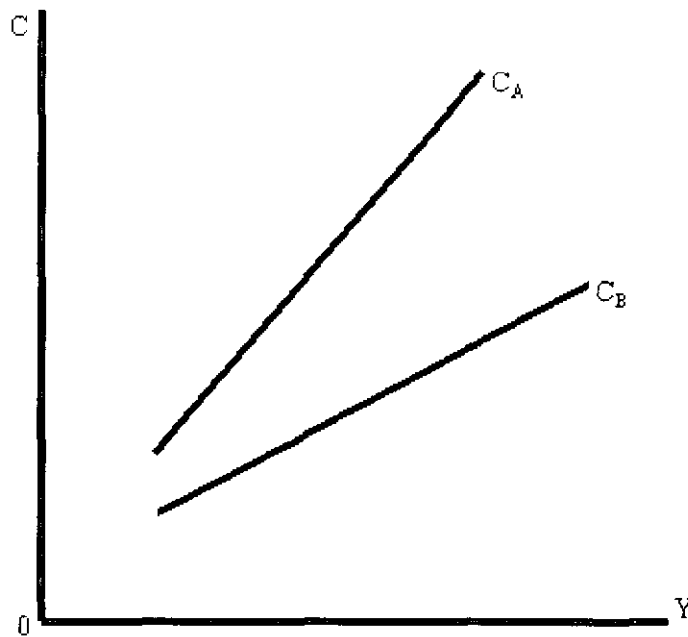
     We can say that the

     [1]   MPC is greater in B than in A
     [2]   Investment at any given income level is greater in B than in A.
     [3]   MPS is smaller in B than in A
     [4]   MPC is greater in A than in B
     [5]   MPC is the same in both economies

6   The multiplier is useful in determining the

     [1]   full-employment unemployment rate
     [2]   level of business inventories
     [3]   rate of inflation
     [4]   change in equilibrium GDP resulting from a change in spending
     [5]   prime interest rate

7   If the MPC is 0,7 and gross investment increases by R3 billion, the equilibrium GDP will

     [1]   increase by R10 billion
     [2]   increase by R2,10 billion
     [3]   decrease by R4,29 billion
     [4]   increase by R4,29 billion
     [5]   stay the same

                                                              [TURN OVER]

8   If the multiplier in an economy is 5, a R20 billion increase in net exports will

     [1]   increase GDP by R100 billion
     [2]   reduce GDP by R20 billion
     [3]   decrease GDP by R100 billion
     [4]   increase GDP by R20 billion
     [5]   the multiplier does not have an effect on net exports

9   The multiplier effect means that

     [1]   consumption is typically several times as large as saving
     [2]   a small change in consumption can cause a much larger increase in investment
     [3]   a small increase in investment can cause GDP to change by a larger amount
     [4]   a small decline in the MPC can cause equilibrium GDP to rise by several times that amount
     [5]   banks are able to create money

10   The horizontal range of the aggregate supply curve

     [1]   indicates that resource prices are not constant
     [2]   implies that output can be increased only by increasing the price level
     [3]   assumes there are no unemployed resources in the economy
     [4]   is explained by the law of increasing opportunity costs
     [5]   shows the economy is in a recession or depression

11   Given the AD-AS model, if the national incomes of the major trading partners of South Africa were to
     rise, SA's

     [1]   aggregate demand curve would shift to the left
     [2]   aggregate supply curve would shift to the left
     [3]   aggregate supply curve would shift to the right
     [4]   aggregate demand curve would shift to the right
     [5]   both [3] and [4]

12   If exports increase by R100 million and imports increase by R95 million, it will shift the

     [1]   aggregate expenditures curve upward and the aggregate demand curve rightward
     [2]   aggregate expenditures curve upward and the aggregate demand curve leftward
     [3]   aggregate expenditures curve downward and the aggregate demand curve rightward
     [4]   aggregate expenditures curve downward and the aggregate demand curve leftward
     [5]   aggregate expenditures curve will stay constant and the aggregate demand curve rightward

13   According to the monetary transmission mechanism, a change in the interest rate will cause a
     change in _____, which will lead to a change in _____ and ultimately lead to change in
     _____ or income

     [1]   money supply, demand for money, wealth
     [2]   repo rate, deposit requirements, wealth
     [3]   consumption, price levels, living standards
     [4]   investment spending, aggregate spending, total production
     [5]   exports, net exports, total production

14   Which of the following is a shortcoming of GDP?

      [1]   GDP measures all final goods and services to avoid double counting
      [2]   GDP of South Africa does not include the value of imports into South Africa
      [3]   The work done by housewives is not recorded in the value of GDP
      [4]   GDP is only measured over a certain period, usually a year
      [5]   The work done in the formal sector is recorded in the value of GDP

15   The labels for the axes of the aggregate demand graph should be

      [1]   quantity of a product on the vertical axis and the price of a product on the horizontal axis
      [2]   price of a product on the vertical axis and quantity of a product on the horizontal axis
      [3]   real domestic output on the vertical axis and the price level on the horizontal axis
      [4]   real domestic output on the horizontal axis and the price level on the vertical axis
      [5]   aggregate spending on the vertical axis and output on the horizontal axis

16   Cost-push inflation

      [1]   occurs when production costs push prices up
      [2]   can be caused by labour (trade union) demands
      [3]   can be caused by a rand appreciation
      [4]   Both options [1] and [2] are correct
      [5]   Both options [2] and [3] are correct

17   A decrease in investment spending will cause a(n)

      [1]   decrease in aggregate demand
      [2]   increase in aggregate demand
      [3]   increase in aggregate supply
      [4]   decrease in aggregate supply
      [5]   no change in either aggregate demand or aggregate supply

18   The relationship between the aggregate demand curve and the aggregate expenditures model is
      shown in the fact that

      [1]   a decrease in the price level shifts the aggregate expenditures schedule downward and
             decreases real GDP
      [2]   a decrease in the price level shifts the aggregate expenditures schedule upward and increases
             real GDP
      [3]   an increase in the price level shifts the aggregate expenditures schedule upward and
             increases real GDP
      [4]   an increase in the price level shifts the aggregate expenditures schedule downward and
             increases real GDP
      [5]   there is no relationship between these two curves

19   Which of the following is NOT part of South Africa's GDP?

      [1]   The value of an insurance policy on a new BMW sold by a South African company
      [2]   The value of a BMW imported from Germany
      [3]   The value of a BMW produced in South Africa
      [4]   The commissions earned by a BMW dealership in South Africa
      [5]   The cost to wash your BMW in South Africa

[TURN OVER]

20   Which of the following is an example of a final good or service?

      [1]   Gold that is sold to manufacture wedding rings
      [2]   Vegetables purchased by local restaurants to make soup
      [3]   Wood used in the production of houses
      [4]   A CD player purchased as a gift
      [5]   Sugar bought to manufacture candy

21   Aggregate spending on South African production comprises

      [1]   private consumption, government spending, private investment and total savings
      [2]   private consumption, government spending, private investment and net exports
      [3]   private consumption, government transfers, private investment and net exports
      [4]   private consumption, government investment, private savings and net exports
      [5]   private consumption, government spending, private investment and spending by foreigners on
             South African goods

22   In the Keynesian aggregate expenditure model, if inventories start to decrease, it could be a signal
      that

      [1]   aggregate spending is less that total output and businesses should decrease output
      [2]   aggregate spending is less that total output and businesses should increase output
      [3]   aggregate spending and total output are equal
      [4]   aggregate spending is greater that total output and businesses should decrease output
      [5]   aggregate spending is greater that total output and businesses should increase output

23   The _____ demand for money arises out of the need to hold money as a medium of exchange
      This demand for money is a function of _____

      [1]   precautionary, interest rates
      [2]   transactions, national income
      [3]   speculative, interest rates
      [4]   precautionary, national income
      [5]   transactions, interest rates

24   An increase in the market interest rates, in general

      [1]   will shift the money demand curve downwards
      [2]   implies a lower opportunity cost of holding money balances
      [3]   will cause the price of bonds to fall
      [4]   will increase the purchasing power of money
      [5]   will increase strikes

25   Interest rates in South Africa are essentially determined by

      [1]   the cost of capital
      [2]   the interaction between the demand for money and the supply of money
      [3]   the South African Reserve Bank
      [4]   the South African government
      [5]   the quantity of money in circulation

26   Which of the following will cause the demand curve for money to shift to the right?

      [1]   An increase in real GDP
      [2]   A decrease in the repo rate
      [3]   An increase in the quantity of money available
      [4]   A decrease in the quantity of money available
      [5]   An increase in the repo rate

27   When the inflation rate is high the SARB will tend to

      [1]   reduce the cost of credit to the banks
      [2]   increase the repo rate
      [3]   purchase government bonds on the open market
      [4]   decrease the repo rate
      [5]   use moral suasion to persuade banks to provide more loans to their clients

28   If the real interest rate is negative, then

      [1]   the inflation rate is larger than the nominal interest rate
      [2]   the inflation rate is smaller than the real interest rate
      [3]   the inflation rate is smaller than the nominal interest rate
      [4]   lenders will gain
      [5]   the real value of a loan will increase

29   If government spending is higher than current government revenue, this is known as

      [1]   a deficit on the current account of the balance of payments
      [2]   the budget deficit
      [3]   the public debt
      [4]   money financing
      [5]   good fiscal management

30   A tax such as value added tax (VAT) would generally be viewed as

      [1]   progressive, because the consumption expenditure of the rich is greater than that of the poor
      [2]   regressive, because low-income households spend a greater proportion of their income on
             goods that attract VAT
      [3]   proportional, because the VAT rate is constant across goods that attract VAT
      [4]   progressive, because most goods consumed by poor households are zero rated
      [5]   regressive, because the VAT burden increases as household income rises

31   After a raise of R120 000 per year, Thandi's consumption expenditure increase by R9 000 every
      month What is Thandi's marginal propensity to save?

      [1]   0,925
      [2]   0,9
      [3]   0,075
      [4]   0,5
      [5]   0,1

32   If the financial account is in surplus, then

      [1]   the value of imports exceeds the value of exports
      [2]   the value of exports exceeds the value of imports
      [3]   there will be a surplus on the overall balance of payments
      [4]   capital outflows exceed capital inflows
      [5]   there has been a net inflow of foreign capital into the country

33   Other things equal, recessions in the economies of South Africa's trading partners will

      [1]   have no perceptible impact on the South African economy
      [2]   cause inflation in the South African economy
      [3]   depress real output and employment in the South African economy
      [4]   stimulate real output and employment in the South African economy
      [5]   increase tourists to South Africa from these countries

34   The foreign exchange rate is the rate at which

      [1]   one country's goods trade for those of another country
      [2]   the currency of one country trades for the goods of another country
      [3]   currencies of different countries are exchanged
      [4]   one country's currency trades for silver provided by another country
      [5]   the services of one country trade for the currency of another country

35   The exchange rate is $0,50 = R5,00 If a car sells for $16 000, then its cost in Rands would be

      [1]   R80 000
      [2]   R16 000
      [3]   R12 800
      [4]   R160 000
      [5]   R64 000

36   As a result of more Americans visiting South Africa, we can expect

      [1]   an appreciation of the rand relative to the dollar
      [2]   a depreciation of the rand relative to the dollar
      [3]   an appreciation of the dollar relative to the rand
      [4]   that it will cost South Africans more to visit the United States
      [5]   an appreciation of the dollar relative to all major currencies

37   If we were to add up the value of output of all firms in the economy, we would

      [1]   obtain GDP at factor cost
      [2]   obtain GDP at market prices
      [3]   obtain GDP using the income method
      [4]   overestimate the value of production taking place in the economy
      [5]   underestimate the value of production taking place in the economy

38   If dairy farming is subsidised, we would expect the value of a litre of milk to be

      [1]   equal to the price paid by the consumer for a litre of milk
      [2]   greater than the price paid by the consumer for a litre of milk
      [3]   less than the price paid by the consumer for a litre of milk
      [4]   lower because of the subsidy
      [5]   higher because of the subsidy

39   Since the R200 note was first introduced in South Africa, its value has

      [1]   decreased in nominal terms and increased in real terms
      [2]   decreased in nominal terms and decreased in real terms
      [3]   increased in nominal terms and decreased in real terms
      [4]   increased in nominal terms and increased in real terms
      [5]   decreased in real terms, although its nominal value has remained unchanged

40   Refer to the table below that describes the income distribution in a country

Population	Cumulative Percentage	
	Population	Income
Poorest 20%	20	5
Next 20%	40	10
Next 20%	60	25
Next 20%	80	60
Richest 20%	100	100

In this country, the richest 40% of the population earn _____ of the total income, whilst the poorest 40% of the population earn _____ of the total income

      [1]   40%, 15%
      [2]   40%, 10%
      [3]   60%, 15%
      [4]   75%, 10%
      [5]   75%, 15%

                              *** *** ****

As your mark-reading sheet can get lost, you must also write down your answers for Section B in the space provided below

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UNIVERSITY OF SOUTH AFRICA UNISA UNIVERSITEIT VAN SUID-AFRIKA

EXAMINATION MARK READING SHEET

university of south africa

EKSAMEN-MERKLEESBLAD

PART 1 (GENERAL/ALGEMEEN) DEEL 1

STUDY UNIT e.g PSY100-X
STUDIE EENHEID bv PSY100 X

① -

PAPER NUMBER
VRAESTELNOMMER **②**

INITIALS AND SURNAME **③**
VOORLETTERS EN VAN

DATE OF EXAMINATION
DATUM VAN EKSAMEN **④**

EXAMINATION CENTRE (E G PRETORIA) **⑤**
EKSAMENSENTRUM (BV PRETORIA)

STUDENT NUMBER
STUDENTENOMMER **⑥**

⑦

UNIQUE PAPER NO
UNIEKE VRAESTEL NR **⑧**

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For use by examination invigilator

Vir gebruik deur eksamenopsiener

◆

IMPORTANT

1 USE ONLY AN HB PENCIL TO COMPLETE THIS SHEET
2 MARK LIKE THIS ➡
3 CHECK THAT YOUR INITIALS AND SURNAME HAS BEEN FILLED IN CORRECTLY
4 ENTER YOUR STUDENT NUMBER FROM LEFT TO RIGHT
5 CHECK THAT YOUR STUDENT NUMBER HAS BEEN FILLED IN CORRECTLY
6 CHECK THAT THE UNIQUE NUMBER HAS BEEN FILLED IN CORRECTLY
7 CHECK THAT ONLY ONE ANSWER PER QUESTION HAS BEEN MARKED
8 DO NOT FOLD

BELANGRIK

1 GEBRUIK SLEGS N HB POTLOOD OM HIERDIE BLAD TE VOLTOOI
2 MERK AS VOLG ➡
3 KONTROLEER DAT U VOORLETTERS EN VAN REG INGEVUL IS
4 VUL U STUDENTENOMMER VAN LINKS NA REGS IN
5 KONTROLEER DAT U DIE KORREKTE STUDENTENOMMER VERSTREK HET
6 KONTROLEER DAT DIE UNIEKE NOMMER REG INGEVUL IS
7 MAAK SEKER DAT NET EEN ALTERNATIEF PER VRAAG GEMERK IS
8 MOENIE VOU NIE

PART 2 (ANSWERS/ANTWOORDE) DEEL 2

#		#		#		#	
1	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	36	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	71	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	106	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
2	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	37	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	72	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	107	c1ɔ c2ɔ c3ɔ c4ɔ c6ɔ
3	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	38	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	73	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	108	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
4	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	39	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	74	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	109	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
5	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	40	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	75	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	110	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
6	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	41	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	76	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	111	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
7	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	42	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	77	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	112	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
8	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	43	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	78	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	113	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
9	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	44	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	79	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	114	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
10	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	45	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	80	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	115	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
11	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	46	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	81	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	116	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
12	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	47	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	82	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	117	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
13	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	48	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	83	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	118	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
14	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	49	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	84	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	119	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
15	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	50	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	85	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	120	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
16	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	51	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	86	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	121	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
17	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	52	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	87	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	122	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
18	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	53	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	88	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	123	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
19	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	54	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	89	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	124	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
20	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	55	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	90	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	125	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
21	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	56	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	91	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	126	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
22	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	57	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	92	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	127	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
23	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	58	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	93	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	128	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
24	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	59	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	94	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	129	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
25	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	60	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	95	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	130	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
26	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	61	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	96	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	131	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
27	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	62	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	97	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	132	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
28	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	63	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	98	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	133	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
29	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	64	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	99	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	134	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
30	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	65	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	100	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	135	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
31	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	66	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	101	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	136	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
32	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	67	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	102	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	137	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
33	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	68	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	103	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	138	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
34	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	69	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	104	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	139	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ
35	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	70	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	105	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ	140	c1ɔ c2ɔ c3ɔ c4ɔ c5ɔ

⑩

Specimen only