NWU®

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|---|---|---|---|---|---|---|---|
| Modulekode: | MBAA 813 | Metode van aflewering: | Deeltyds Sentra | Datum: | 04/06/2020 | | |
| Tipe assessering: | Eksamen 1e geleentheid | Vraestelnommer: | 1 | Sessie: | 9:00 | Tydsduur: | 4 uur |

| | |
|---|---|
| Modulebeskrywing: **Bestuursekonomie / Managerial Economics** | Lokaal: |

Afrolmetode: Rug-aan-Rug

| | | |
|---|---|---|
| Aantal vraestelle **MK: 40** | Aantal vraestelle **PK: 150** | Aantal vraestelle **VDK: 0** |

| **Benodighede** vir vraestel | | Aantal per student | **Benodighede** vir vraestel | | Aantal per student |
|---|---|---|---|---|---|
| Antwoordskrifte | X | 2 | Multikeuse-kaarte (A5 – 40 vrae) | | |
| Presensiestrokies vir invulvraestel | X | 1 | Multikeuse-kaarte (A4 – 115 vrae) | | |
| Rofwerkpapier | X | 1 | Grafiekpapier | | |

| | | | |
|---|---|---|---|
| Is daar 'n **bylaag** aangeheg? | **Ja** | Indien **Ja** gee 'n kort beskrywing: | **Daar is 'n meegaande invulblad vir Afdeling A se antwoorde en moet saam met die eksamenvraestel uitgedeel word.** |

**NB: Eksamenafdeling doen geen kontrole wat inhoud of bladsynommers van bylae betref nie.**

**Sakrekenaars:** **Ja**

| **Ander hulpmiddels** bv. woordeboeke, studiegidse, ens.: | | |
|---|---|---|
| **Oopboek vraestel** | | |

| | |
|---|---|
| Inhandiging van antwoordskrifte: | **Gewoon** |
| Indien **Per dosent,** lys **Vanne:** | |

**Eksaminator(e):**

(1) **Prof. A Heymans (PK)** Bylyn: **991352**
Selfoonnr: **0766552411** Handtekening

(2) **Prof. R Parsons (PK)** Bylyn: **991368**
Selfoonnr: **0832256642** Handtekening

(3) **Dr. L Rangasammy (MK)** Bylyn: **000000**
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**Interne Moderator:**

**Prof. C van Heerden** Bylyn: **991476**
Selfoonnr: **0828277860** Handtekening

**Eksterne Moderator:**

**Dr. J Coetzee** Selfoonnr: **0514019266**

**Ingehandig deur:**

**Prof. A Heymans** Bylyn: **991352**

Verwysingsnommer: 7.1.9.3.

| Benodigdhede vir hierdie vraestel/Requirements for this paper: | | | |
|---|---|---|---|
| Antwoordskrifte/ Answer scripts: | X | Multikeusekaarte (A5)/ Multi-choice cards (A5): | |
| Presensiestrokies (Invulvraestel)/ Attendance slips (Fill-in paper): | X | Multikeusekaarte (A4)/ Multi-choice cards (A4): | |
| Rofwerkpapier/ Scrap paper: | X | Grafiekpapier/ Graph paper: | |

| Sakrekenaars/Calculators: | Ja/Yes |
|---|---|
| **Ander hulpmiddels/Other resources:** | |
| Oopboek vraestel/ Open book exam | |

| | | | |
|---|---|---|---|
| Tipe Assessering/ Type of Assessment: | **Eksamen 1e geleentheid Exam 1st opportunity Vraestel/Paper 1** | Kwalifikasie/ Qualification: | **MBA** |
| Modulekode/ Module code: | **MBAA 813** | Tydsduur/ Duration: | **4 uur / 4 hour** |
| Module beskrywing/ Module description: | **Bestuursekonomie / Managerial Economics** | Maks/ Max: | **100** |
| Eksaminator(e)/ Examiner(s): | **Prof. André Heymans Prof. Raymond Parsons Dr. Logan Rangasamy** | Datum/ Date: | **04/06/2020** |
| Interne/Internal Moderator(s): | **Prof. Chris van Heerden** | Tyd/ Time: | **09:00** |
| Eksterne Moderator(s)/ External Moderator(s): | **Dr. J Coetzee** | | |

Inhandiging van antwoordskrifte/Submission of answer scripts: **Gewoon/Ordinary**

## Besonderhede van student / Details of student:

Titel/ Title: ________ Voorletters/ Initials: ________ Van/ Surname: ____________________

Universiteitsnommer/ University number: | | | | | | | | |

Kontaknommer/ Contact number: | | | | | | | | | | |

Handtekening/ Signature: ____________________

## Eksamenvoorskrifte / Examination instructions

1. Studente mag in die eerste halfuur van 'n sessie tot die lokaal toegelaat word, maar geen ekstra tyd word toegestaan nie.
2. Geen student word toegelaat om die lokaal te verlaat binne die eerste halfuur van 'n eksamensessie nie.
3. Studente bring sakke na lokaal op **eie risiko**, en moet dit voor in die lokaal neersit.
4. Studente mag nie selfone/elektroniese toestelle by hulle hê en/of hanteer nie.
5. Geen verversings word in 'n eksamenlokaal toegelaat nie.
6. Studente mag nie die lokaal verlaat om te gaan rook nie.
7. Skryf op beide kante van die bladsye.
8. Skryf slegs in swart of blou ink.
9. Geen bladsye mag uit die antwoordskrif verwyder word nie.
10. Studente mag nie ontoelaatbare materiaal by hulle hê tydens 'n sessie nie, bv. notas en/of objekte wat notas bevat nie.
11. Geen items mag tydens die sessie geleen word nie.
12. Studente mag nie 'n ander student probeer help of probeer om hulp te kry nie.
13. Studente **moet** hul antwoordskrifte aan toesighouers oorhandig voordat hulle die lokaal verlaat.
14. Die presensiestrokie op die agterblad, wat ook as onderneming geld, **moet** voltooi en ingegee word.

1. Students are allowed into the venue in the first half hour of a session, but no extra time is granted.
2. No student is allowed to leave the venue before half an hour of the examination session has elapsed.
3. Students bring bags to the venue at **own risk**, and must put them in front of the room.
4. Students may not have cell phones/electronic devices with them and/or handle them.
5. No refreshments are allowed in the examination venue.
6. Students may not leave the room for a smoke break.
7. Write on both sides of each page.
8. Write in black or blue ink only.
9. No pages may be removed from the answer scripts.
10. Students may not have unauthorised material with them during a session, e.g. notes and/or objects that contain notes.
11. No items may be borrowed during the session.
12. Students may not attempt to assist another student, or attempt to obtain assistance.
13. Students **must** hand in their answer scrips to invigilators before they leave the venue.
14. The attendance slip on the back cover that also serves as an undertaking, **must** be completed and handed in.

# INSTRUCTIONS

***ANSWER ALL THE SECTIONS***

## SECTION A (*Multiple choice*) [21]

**Question 1** (1½)

***Which of the following statements are correct?***

i) ***An increase in the price of a product will cause the demand curve of a substitute product to shift to the left.***

ii) ***If a producer manufactures a unit elastic product, he/she cannot influence total revenue by changing the price.***

iii) ***Frictional unemployment occurs when people are between jobs.***

iv) ***The elasticity of products changes over time.***

v) ***If products X and Y are complimentary, an increase in X's price will lead to an increase in demand for Y***.

**A) i, ii, iii & v** **B) i, iii & v**

**C) ii, iii & iv** **D) ii, iv & v**

**E) i & iii**

**Question 2** (1½)

***Which of the following statements are correct?***

i) ***The production possibility frontier is steeper at the right end than the left because some resources are better suited to make some products than others*.**

ii) ***Perfectly inelastic demand is a horizontal line.***

iii) ***The production possibility frontier illustrates how much of each product is manufactured in the economy.***

iv) ***Inflation causes higher interest rates.***

v) ***The production of consumer goods and capital goods will always occur on the production possibility curve.***

**A) i, ii, iii & v** **B) i, iii & v**

**C) ii, iii & iv** **D) ii, iv & v**

**E) i & iii**

**Question 3** (1½)

***Which of the following statements are correct?***

i) ***The 4 production factors are Capital, Labour, Land & Entrepreneurship.***

ii) ***Lower interest rates cause inflation.***

iii) ***A price floor leads to surplus production.***

iv) ***If products X and Y are complimentary, an increase in X's price will lead to an increase in demand for Y***.

v) ***The elasticity of products changes over time.***

**A) i, ii, iii & v** **B) i, iii & v**

**C) ii, iii & iv** **D) ii, iv & v**

**E) i & iii**

**Question 4** (1½)

***Which of the following statements are correct?***

i) ***The number of buyers who gain from the price ceiling is greater than the original number of buyers*.**

ii) ***A price ceiling creates an excess demand.***

iii) ***A price ceiling generates winners as well as losers.***

iv) ***To have an effect, the price ceiling must be set at a lower level than the original market price.***

v) ***A price ceiling is an example of government intervention to assist the producer*.**

**A) i, ii, iii & v** **B) i, iii & v**

**C) ii, iii & iv** **D) ii, iv & v**

**E) i & iii**

**Question 5** (1½)

***Which of the following statements are correct?***

i) ***If a producer manufactures a unit elastic product, he/she can influence total revenue by changing the price.***

ii) ***The Reserve Bank can limit inflation by decreasing the supply of money.***

iii) ***Public goods are excludable in nature.***

iv) ***Perfectly inelastic supply is a vertical line.***

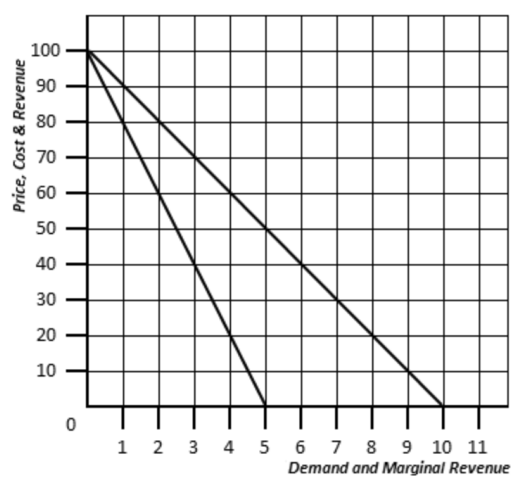
v) ***The elasticity of products changes over time.***

**A) i, ii, iii & v** **B) i, iii & v**

**C) ii, iii & iv** **D) ii, iv & v**

**E) i & iii**

**Question 6** (1½)




***If a profit maximising monopolist with a constant unit cost equal to R40 faces the demand curve plotted in the graph, then the monopolist's total revenue will be equal to:***

**A.** **R120.**

**B.** **R220.**

**C.** **R240.**

**D.** **R400.**

**E)** ***None of the above.***

**Question 7** (1½)

***A decrease in price from R45 to R40 per bottle water leads to an increase in demand of 1500 to 2000 bottles. The elasticity of demand of bottled water is?***

A) 0.149
B) 4.444
C) -0.149
D) -4.262
E) ***None of the above.***

**Question 8** (1½)

***What could be said about equilibrium prices and equilibrium quantities if demand should increase and supply should decrease?***

A) ***Price will increase and quantity will decrease.***
B) ***Price will increase and quantity's movement is uncertain.***
C) ***Price will increase and quantity will increase.***
D) ***Price will decrease and quantity will increase.***
E) ***Price's movement is uncertain and quantity will decrease.***

**Question 9** (1½)

***Consider the following demand and supply equations:***

$Q_d = 250 – 8P$ $Q_s = 12P$

Die waardes van P en Q by ewewig is? / ***The values of P and Q at equilibrium are?***

**A)** P = 150 & Q = 12.50
**B)** P = 1.25 & Q = 15
**C)** P = 15 & Q = 1.25
**D)** P = 50 & Q = 15
**E)** ***None of the above.***

**Question 10** (1½)

***Which of the following statements are correct?***

i) ***Lower interest rates lead to higher inflation.***
ii) ***Inflation can be caused by higher aggregate demand in the economy.***
iii) ***A price floor leads to surplus production.***
iv) ***Perfectly inelastic demand is a horizontal line.***
v) ***The 4 production factors are Capital, Labour, Land & Entrepreneurship.***

**A) i, ii, iii & v**
**B) i, iii & v**
**C) ii, iii & iv**
**D) ii, iv & v**
**E) i, & iii**

**Question 11** (1½)

***Put the following events in a chronological order.***

***A) Excess reserves increase, Investment spending increases, Money supply falls, Real GDP increases.***
***B) Excess reserves decrease, Investment spending increases, Money supply falls, Real GDP increases.***
***C) Excess reserves increase, Money supply rises, Interest rate falls, Investment spending increases.***
***D) Aggregate demand increases, Money supply increases, Interest rate falls, Investment spending increases.***
***E) Excess reserves increase, Interest rate falls, Money supply rises, Investment spending increases.***

**Question 12** (1½)

***Which of the following statements are correct?***

i) $MC = \frac{\Delta TC}{\Delta Q}$.

ii) ***The formula for point elasticity is:*** $E_d = \frac{\left(\frac{Q_2 - Q_1}{Q_{2 \div 2}}\right)}{\frac{P_2 - P_1}{P_{2 \div 2}}}$.

iii) ***The misuse of public goods can be addressed with tax.***

iv) $AP = \frac{TP}{Q}$.

v) TC = TFC + TVC.

**A) i, ii, iii & v** **B) i, iii & v**

**C) ii, iii & iv** **D) ii, iv & v**

**E) i & iii**

**Question 13** (1½)

***Which of the following will shift the aggregate demand curve of South Africa to the left?***

i) ***An increase in household debt.***

ii) ***A sharp increase in the fuel price.***

iii) ***A decrease in real interest rates.***

iv) ***A decrease in household income.***

v) ***A decrease in government debt.***

**A) i, ii, iii & v** **B) i, iii & v**

**C) ii, iii & iv** **D) ii, iv & v**

**E) i, & iii**

**Question 14** (1½)

***Which of the following statements are correct given the following demand and supply equations?***

$Q_D = 147 - 15P$ $Q_S = -15 + 3P$

A) ***If the equilibrium price decrease by R3, $Q_S$ will change to 15 and $Q_D$ to 9***

B) ***If the equilibrium price increase by R2, $Q_S$ will change to 14 and $Q_D$ to 0.***

C) ***If the equilibrium price increase by R3, $Q_S$ will change to 9 and $Q_D$ to 3.***

D) ***If the equilibrium price increase by R5, $Q_S$ will change to 7 and $Q_D$ to 17.***

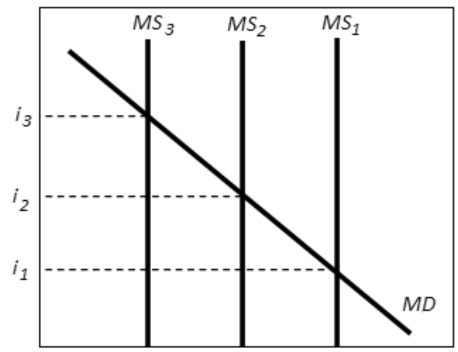
E) ***If the equilibrium price decrease by R2, $Q_S$ will change to 6 and $Q_D$ to 42.***

## SECTION B (*Calculations*) [29]

**Question 1** (2)

***Use the graphs to answer the following questions***:

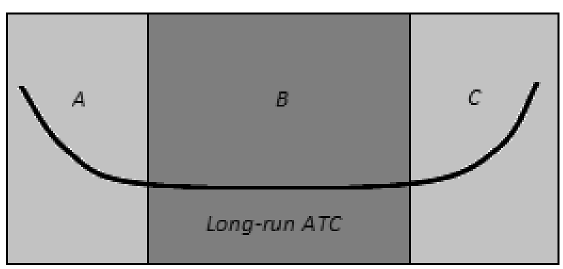
a) ***Who is responsible for this policy?*** [½]
b) ***Why is this action followed?*** [½]
c) ***What will happen with aggregate demand (AD)?*** [½]
d) ***What will happen with investment?*** [½]




**a) The Reserve bank** [½]
**b) Inflation is too high – above 6% level** [½]
**c) Total demand will shift to the left** [½]
**d) Investment spending is reduced** [½]

**Question 2** (3)

***Identify areas A, B and C and say what one can deduce from this graph regarding the market structure of this firm.***




A Economies of scale
B Constant economies of scale
C Diseconomies of scale

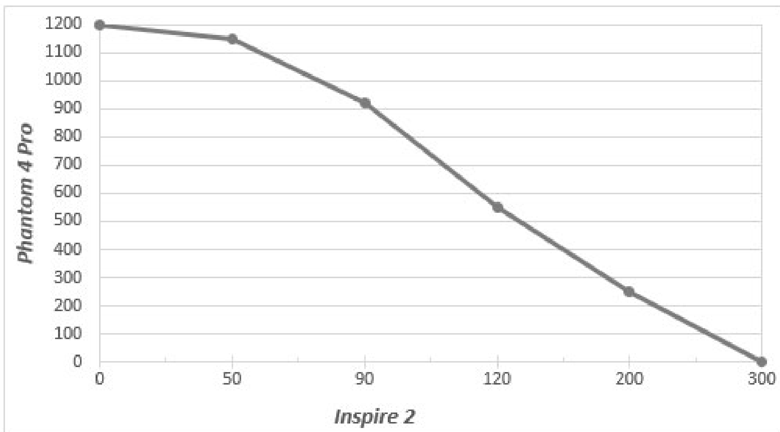
This company displays constant returns to scale for a considerable quantity of output. It can therefore not be an oligopoly or monopoly. It can be a perfect competitor or monopolistic competitor.

**Question 3** (8)

***DJI manufactures a range of drones. The table below indicates how many dji Phantom 4 Pros they can manufacture in a month, and how many dji Inspire 2's they can manufacture over the same period. Answer the questions that follow:***

| Option | dji<br>Phantom 4 Pro | dji<br>Inspire 2 |
|---|---|---|
| **A** | 1200 | 0 |
| **B** | 1150 | 50 |
| **C** | 920 | 90 |
| **D** | 550 | 120 |
| **E** | 250 | 200 |
| **F** | 0 | 300 |

a) ***Show graphically what opportunity cost DJI faces when manufacturing these drones. It is important that you name your axes. Marks will be deducted for unnamed axes and missing headings.*** [3]




b) ***Say it costs DJI R25 000 to manufacture one Phantom 4 Pro and it costs them R31 000 to manufacture one Inspire 2. Calculate the total profit for every combination of drones if the Phantom 4 Pro sells for R31 000 per unit, and the Inspire 2 for R59 000 per unit.*** [4]

**Phantom 4 Pro**

| | (Price | × | Q) | = | Revenue | - | (Cost/unit | × | Q) | = | Profit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A** | ( R31 000,00 | × | 1200 | ) = | R37 200 000,00 | - | ( R25 000,00 | × | 1200 | ) = | R7 200 000,00 |
| **B** | ( R31 000,00 | × | 1150 | ) = | R35 650 000,00 | - | ( R25 000,00 | × | 1150 | ) = | R6 900 000,00 |
| **C** | ( R31 000,00 | × | 920 | ) = | R28 520 000,00 | - | ( R25 000,00 | × | 920 | ) = | R5 520 000,00 |
| **D** | ( R31 000,00 | × | 550 | ) = | R17 050 000,00 | - | ( R25 000,00 | × | 550 | ) = | R3 300 000,00 |
| **E** | ( R31 000,00 | × | 250 | ) = | R7 750 000,00 | - | ( R25 000,00 | × | 250 | ) = | R1 500 000,00 |
| **F** | ( R31 000,00 | × | 0 | ) = | R0,00 | - | ( R25 000,00 | × | 0 | ) = | R0,00 |

**Inspire 2**

| | (Price | × | Q) | = | Revenue | - | (Cost/unit | × | Q) | = | Profit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **A** | ( R59 000,00 | × | 0 | ) = | R0,00 | - | ( R31 000,00 | × | 0 | ) = | R0,00 |
| **B** | ( R59 000,00 | × | 50 | ) = | R2 950 000,00 | - | ( R31 000,00 | × | 50 | ) = | R1 400 000,00 |
| **C** | ( R59 000,00 | × | 90 | ) = | R5 310 000,00 | - | ( R31 000,00 | × | 90 | ) = | R2 520 000,00 |
| **D** | ( R59 000,00 | × | 120 | ) = | R7 080 000,00 | - | ( R31 000,00 | × | 120 | ) = | R3 360 000,00 |
| **E** | ( R59 000,00 | × | 200 | ) = | R11 800 000,00 | - | ( R31 000,00 | × | 200 | ) = | R5 600 000,00 |
| **F** | ( R59 000,00 | × | 300 | ) = | R17 700 000,00 | - | ( R31 000,00 | × | 300 | ) = | R8 400 000,00 |

c) ***Which combination of drones must DJI manufacture to maximise profit?*** [1]

| Maximum Profit | | | | | |
|---|---|---|---|---|---|
| | Profit on Phantom 4 Pro | + | Profit on Inspire 2 | | = Total profit |
| A | R7 200 000,00 | + | R0,00 | = | R7 200 000,00 |
| B | R6 900 000,00 | + | R1 400 000,00 | = | R8 300 000,00 |
| C | R5 520 000,00 | + | R2 520 000,00 | = | R8 040 000,00 |
| D | R3 300 000,00 | + | R3 360 000,00 | = | R6 660 000,00 |
| E | R1 500 000,00 | + | R5 600 000,00 | = | R7 100 000,00 |
| F | R0,00 | + | R8 400 000,00 | = | R8 400 000,00 |

| Moontlikheid / ***Option*** | ***dji Phantom 4 Pro*** | ***dji Inspire 2*** |
|---|---|---|
| A | 1200 | 0 |
| B | 1150 | 50 |
| C | 920 | 90 |
| D | 550 | 120 |
| E | 250 | 200 |
| F | 0 | 300 |

**Question 4** (12)

***Use the table below to calculate the inflation rate for 2017, 2018 and 2019:***

| ***Prices*** | | | | | |
|---|---|---|---|---|---|
| ***Main Item*** | ***Weight*** | 2016 | 2017 | 2018 | 2019 |
| Food and all other beverages | 23.6% | R 20 000 | R 21 000 | R 22 100 | R 23 500 |
| Clothing, restaurants and entertainment | 11.8% | R 2 000 | R 2 400 | R 2 580 | R 2 985 |
| Housing and utilities | 28.0% | R 32 000 | R 33 450 | R 34 250 | R 36 000 |
| Transport and communication | 18.6% | R 8 000 | R 9 900 | R 10 500 | R 10 990 |
| Miscellaneous | 13.9% | R 4 000 | R 4 900 | R 5 500 | R 5 800 |
| Total | 100% | R 66 000,00 | R 71 650,00 | R 74 930,00 | R 79 275,00 |

$$Indeks = \frac{Item_{nuut}}{Item_{oud}}$$

| ***Index of group items*** | | | | | |
|---|---|---|---|---|---|
| ***Main Item*** | ***Weight*** | 2016 | 2017 | 2018 | 2019 |
| Food and all other beverages | 23.6% | 100 | 1,050 | 1,105 | 1,175 |
| Clothing, restaurants and entertainment | 11.8% | 100 | 1,200 | 1,290 | 1,493 |
| Housing and utilities | 28.0% | 100 | 1,045 | 1,070 | 1,125 |
| Transport and communication | 18.6% | 100 | 1,238 | 1,313 | 1,374 |
| Miscellaneous | 13.9% | 100 | 1,225 | 1,375 | 1,450 |
| | | | 1½ | 1½ | 1½ |

$$VPI_{Jaar} = Indeks_{Jaar} \times Item_{gewig}$$

| Consumer Price Index | | | | | |
|---|---|---|---|---|---|
| ***Main Item*** | ***Weight*** | 2016 | 2017 | 2018 | 2019 |
| Food and all other beverages | 23.6% | 100 | 24,780 | 26,078 | 27,730 |
| Clothing, restaurants and entertainment | 11.8% | 100 | 14,160 | 15,222 | 17,612 |
| Housing and utilities | 28.0% | 100 | 29,269 | 29,969 | 31,500 |
| Transport and communication | 18.6% | 100 | 23,018 | 24,413 | 25,552 |
| Miscellaneous | 13.9% | 100 | 22,050 | 24,750 | 26,100 |
| Indeks waarde / ***Index value*** | 100% | 100 | 113,276 | 120,431 | 128,493 |
| | | | 1½ | 1½ | 1½ |

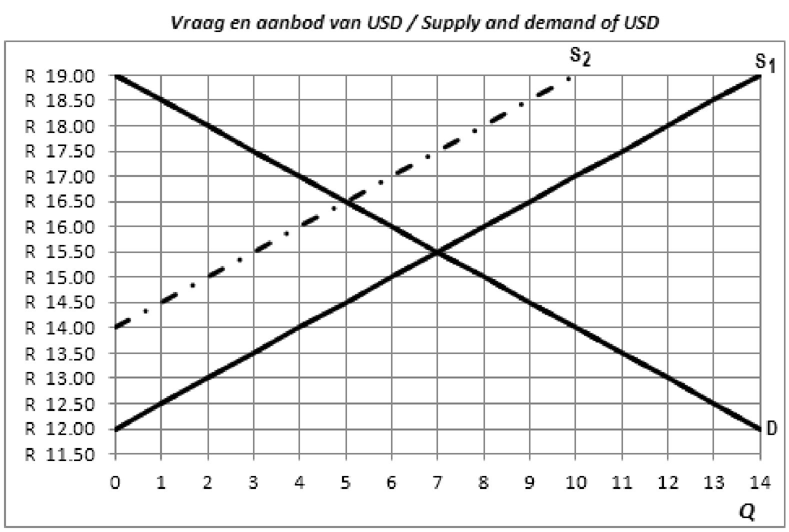
$$Inflasie = \frac{Indeks_{Nuut}}{Indeks_{Oud}}$$

| Consumer Inflation | | | | |
|---|---|---|---|---|
| ***Year*** | 2017 | 2018 | 2019 | |
| ***Inflation*** | 13,28% | 6,32% | 6,69% | √ 3 |

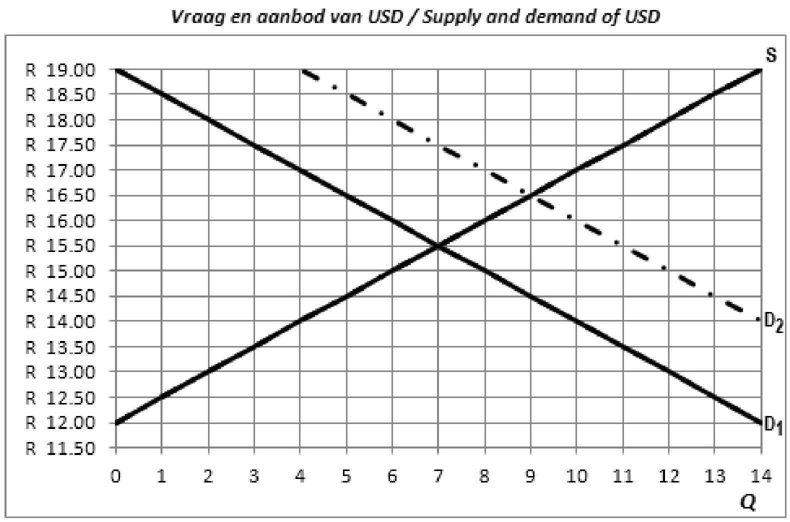
**Question 5** (4)

***Consider the following graphs and state what happens with the value of the particular currency:***

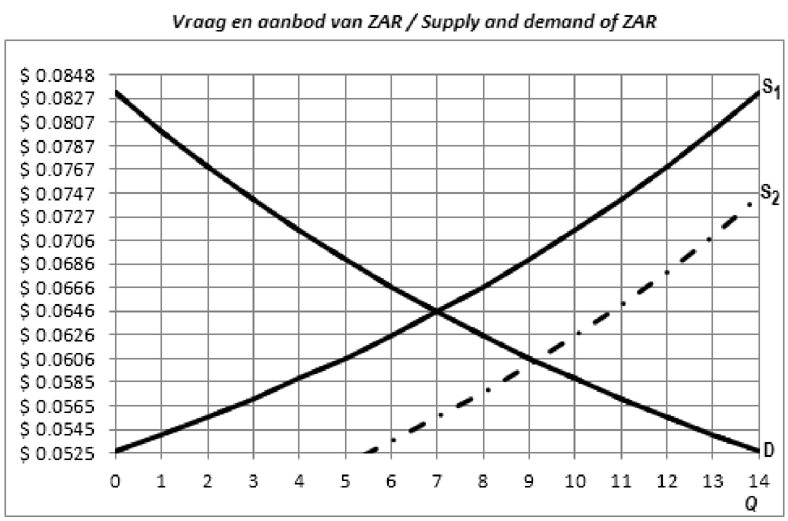
a) ***Did the South African rand (ZAR) appreciate or depreciate?*** [1]



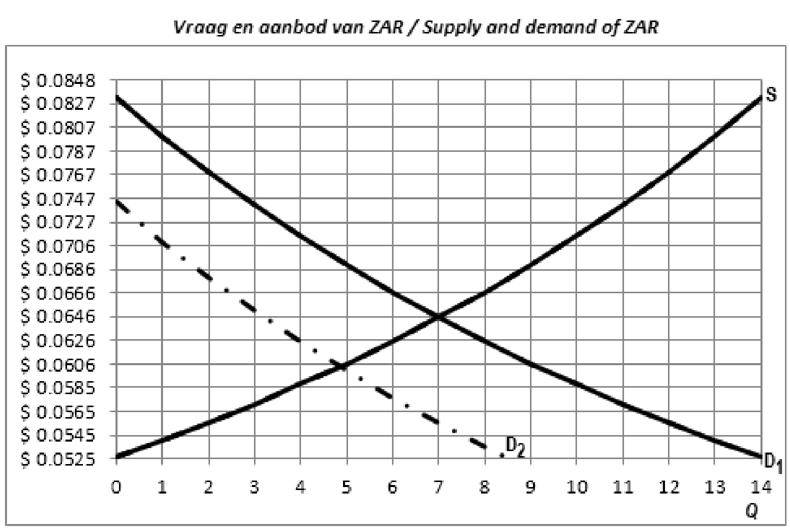
b) ***Did the American dollar (USD) appreciate or depreciate?*** [1]




c) ***Did the South African rand (ZAR) appreciate or depreciate?*** [1]




d) ***Did the American dollar (USD) appreciate or depreciate?*** [1]



## SECTION C (*Essay questions*) **[50]**

**Question 1** (25)

WORLD ECONOMIC FORUM

COMMITTED TO IMPROVING THE STATE OF THE WORLD

Global Challenge Insight Report

# The Future of Jobs

## Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution

> *Today, we are at the beginning of a Fourth Industrial Revolution. Developments in genetics, artificial intelligence, robotics, nanotechnology, 3D printing and biotechnology, to name just a few, are all building on and amplifying one another. This will lay the foundation for a revolution more comprehensive and all-encompassing than anything we have ever seen. Smart systems—homes, factories, farms, grids or cities—will help tackle problems ranging from supply chain management to climate change. The rise of the sharing economy will allow people to monetize everything from their empty house to their car. While the impending change holds great promise, the patterns of consumption, production and employment created by it also pose major challenges requiring proactive adaptation by corporations, governments and individuals. Concurrent to the technological revolution are a set of broader socio-economic, geopolitical and demographic drivers of change, each interacting in multiple directions and intensifying one another. As entire industries adjust, most occupations are undergoing a fundamental transformation. While some jobs are threatened by redundancy and others grow rapidly, existing jobs are also going through a change in the skill sets required to do them. The debate on these transformations is often polarized between those who foresee limitless new opportunities and those that foresee massive dislocation of jobs. In fact, the reality is highly specific to the industry, region and occupation in question as well as the ability of various stakeholders to manage change.*

Watter uitdagings staar maatskappye in die gesig wanneer hulle moet besluit oor die optimale kombinasie van kapitaal en arbeid, met die beperkinge van koste, arbeidsreg, produktiwiteit en mededinging in gedagte? / ***What challenges do firms face when deciding on the optimal mix between capital and labour, given the constraints of costs, labour law, productivity and competition?***

***Technological change – discussion on:***

- **Impact on capital**
  - Increase in productivity – we are moving into an era of abundance
  - Reduction in production costs

- **Impact on labour**
  - Many skills will become redundant and may will lose their jobs as a result (a minimum of 5 million by 2020)
  - Existing skills sets will have to change

    - Skill shortages will be created as new skills will be needed to operate in this changing environment
    - Labour unions will play an increasingly important role in protecting jobs and fighting for their members
    - Current workers will have to be retrained to continue in employment

- **Impact on labour law**
    - Competitive and comparative advantages between countries will be dictated by the flexibility of their labour laws
    - Those who are less stringent will become destinations for FDI as companies will seek out countries that favours a higher capital to labour mix

- **Productivity**
    - Countries that have more capital intensive industries will lead this technological revolution
    - Companies will try to establish themselves in countries that are pro-technology in order to capitalise on a higher-skilled workforce

- **Competition**
    - Competition will continue to become fiercer over time
    - Companies that can't adapt will die out or be bought and restructured
    - Technological advance will be the only way to survive – leading to an ever greater capital to labour mix

**Question 2** (25)

***We are faced with climate change on a previously unseen scale. The impact of these changes are inevitable and will change the way in which we live, work, govern and do business.***

***What challenges will firms face in terms of their responsibilities when it comes to climate change?***

**Climate change – discussion on:**

- **Increases in violent storms that cause damage – tornado's, hurricanes, flash floods etc.**
- **Prolonged droughts – causing food insecurity, famine etc.**
- **Constraints because of changes in the long-term weather patterns**
    - **lack of clean water for human consumption**
    - **lack of potable water for agriculture**
    - **lack of potable water for industrial applications**
    - **rising sea levels**
        - **reduced land area for development**
        - **destruction of current infrastructure**
        - **increased costs of improving infrastructure along sensitive coast lines**
    - **migration caused by climate change**
    - **social instability caused by droughts, famine and volatile weather patterns**
- **Constraints imposed by government**
    - **Policy on the use of water – restrictions put in place with fines for exceeding those restrictions**
    - **Policy on air pollution – worldwide regulations**
        - $CO_2$ tax for polluting the air
        - Carbon credit limits
        - Costs of converting to cleaner production methods
        - Costs for exceeding carbon emissions
    - Increased taxes to pay for the repair of infrastructure

Marks will be awarded for well-structured answers that address the issues above.

**TOTAL: [100]**