REFER TO THE 1: 50000 TOPOGRAPHIC MAP 3322 CA
AND THE 3322 CA ORTHPHOTC MAP OF OUDTSHOORN AND ANSWER THE
QUESTION THAT FOLLOW .

SECTION A

QUESTION 1

MULTIPLE CHOICE

For each of the following statements, **four** alternatives are provided. Write the letter of the correct answer in the block provided on the right hand side of each sub-question.

1.1.   The **orthophoto map** scale is … times larger than the topographic map scale.

A	10
B	20
C	50
<u>**D**</u>	5

D

1.2.   The **contour interval** on the **topographical map** is … metres .

A	30
B	10
<u>**C**</u>	20
D	50

C

1.3   The topographical number 3322 refers to….

A	contours and isobars
B	isobars and contours
C	longitudes and latitudes
<u>D</u>	latitudes and longitudes

D

1.4.   The feature (Δ 312) found in block **B3** on the **topographical map** is a ….

A	isobar
B	spot height
<u>C</u>	trigonometrical station
D	ox – bow lake

C

1.5.   The **primary economic activity** taking place at **E**
        (in block **E12**) on the **topographical** map is …

        A   forestry
        B   industry
        C   quarrying
        D   education

        C

1.6.   The **secondary economic activity** taking place at **D** on the
        orthophoto map is …

        A   mining
        B   industry
        C   farming
        D   recreation

        B

1.7.   The national road that links De Rust to Oudtshoorn
        on the **topographical map** is the …
        A   N2
        B   N12
        C   R29
        D   R62

        B

1.8.   The **land use** found at **C** on the **orthophoto**
        map is a …

        A   brick field.
        B   sewage disposal works.
        C   hospital.
        D   school .

        C

1.9.   The **Oudtshoorn** Aerodrome (in block **G12**) on the
        topographical map is located … of the town centre .

        A   north west
        B   south east
        C   south west
        D   north east
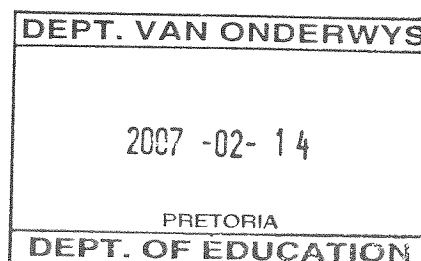
        C

1.10.   Contour lines, trigonometrical station, spot heights and
        bench marks represent …

        A   lines joining places of equal height
        B   places of similar vegetation
        C   altitude (height) above sea level
        D   lines joining places of similar rock type.

        C

                                                        10 x 2=(20)

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SECTION B

QUESTION 2

MAPWORK TECHNIQUES AND CALCULATIONS

2.1   Calculate the **length** (in km) of the Oudtshoorn landing
strip from **P** to **Q** on the **topographical map** (from arrow to arrow)

MAP DISTANCE   =   *3CM*

GROUND DISTANCE =   *3 X 0,5*

                      =   *1.5 KM*   *(4)*

2.2.   Give the difference between the spot height reading of the
longest runway at the Oudtshoorn airport (at **R**) and the
airport buildings (at **S**) on the **orthophoto map**

       330 – 323 = 7 METRES   *1x2=(2)*

2.3.   Locate the trigonometrical station **286 (at G** in block **E 14**) on Grootkop
and spot height **317** (at **F** in block **G15**) on the **topographical map** .

     2.3.1. Determine the **true bearing** of the spot height (**317**) from
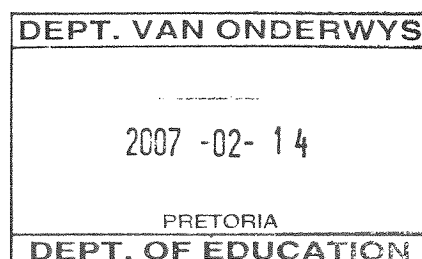   the trigonometrical station(**286**) .

            160° (accept 155° to 165°)   *1x2= (2)*

     2.3.2   Will the magnetic declination for 2006 be greater than or

            less than 23° 34' W? Give a reason for your answer.

            Greater, because it moves to the west.   *2x2=(4)*

2.4   Calculate the **area** (in **km²**) of the region covered by the orthophoto map on the **topographical map**.
(use the formula : **LENGTH x BREADTH =AREA**)
NB length = 13,1 cm   breadth = 12 cm

AREA   =   LXB
LENGTH   =   13,1 X 0,5
*   =   6,55 KM*
BREADTH   =   12CM X 0,5
*   =   6 km*

LXB   =   6,55 X 6

*   =   39,3 Km²*   *(4)*

2.5   Locate and **name** the feature found at the following grid reference on the topographical map:

33° 32' 45" S and 22° 10' 00" E.

Kaffrarian Rifle Flats   *1x2=(2)*

[18]

QUESTION THREE

RELIEF AND DRAINAGE

3.1.   Give the **physical factor** that influenced the construction of the **Oudtshoorn** aerodrome on the **topographical** map (in block **G 12**) .
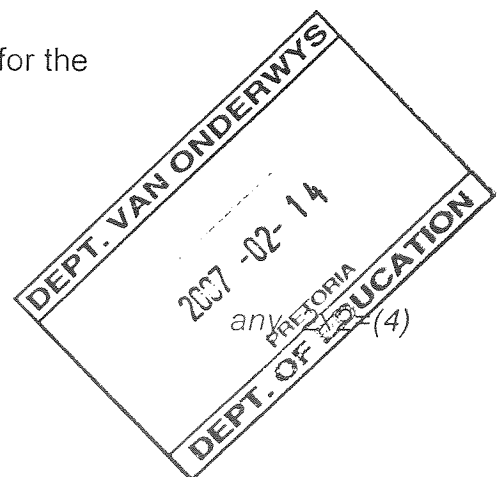
Flat land   *1x2=(2)*

3.2.   Farming over the greater part of the mapped area is limited .

     3.2.1. Identify two **physical factors** responsible for the limited farming activities.

         - hilly land
         - rugged
         - lack of flat land
         - numerous non – perennial rivers
         - seasonal and unreliable rainfall.   *any 2x2=(4)*

3.2.2.   Give **any two measures** that farmers have used to obtain water for farming .

     - Furrows
     - canals
     - boreholes
     - dams   *any 2 x 2=(4)*

3.3.   Identify the **stream pattern** at **I** (in block **K/L 7**) on the topographical map

     Dendritic   *1x2=(2)*

3.4.1   Give **TWO physical factors** restricting the expansion of the town of Oudtshoorn in a north easterly direction.

     Rugged land
     hilly land
     numerous rivers   *2x2=(4)*

3.4.2   Name the **river feature** found on the Dooringrivier (in **Block O 12**) that has the potential to generate hydroelectric power for the area .

     Waterfalls   *1x1=(1)*
                                                       [17]

QUESTION 4

SETTLEMENT AND ECONOMIC ACTIVITIES.

4.1   Give **one** piece of evidence to indicate that Oudtshoorn is an **historic** town.
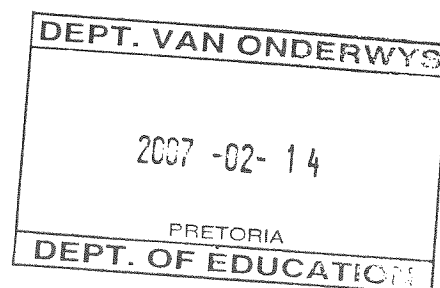
     St . Jades Church   1868 / monument   *1x2=(2)*

4.2   Refer to the **service activity** found at **U** on the **orthophoto** map

     4.2.1   Name this service/activity.

         Sewage disposal works   *1x2=(2)*

4.2.2. Suggest **two** reasons for the location (siting) the service area on the rural/urban fringe.

- Smell
- flat land
- cheaper land
- far from high income area   *any 2x2=(4)*

4.3   The streets at **L** on the **topographical map** form a **gridiron** street pattern..

Give **one** advantage of this street pattern.
*   *It minimizes travelling distances from one point to another.*
*   *It facilitates shopping since shops are located on either sides of the street.*
*   *It is an easy plan to lay-out.*
*   *It is easy to extend on this plan at later stage,*
*   *The pattern yields rectangular buildings plots.*   *any 1x2=(2)*

4.4   Using map evidence list **three** recreational opportunities the town of Oudtshoorn offers to tourists.

- Cango caves
- Golf corse
- Rifle range
- Show grounds
- tourist camp
- crocodile ranch
- Grey stone game park
-recreational grounds.   *any 3x2=(6)*
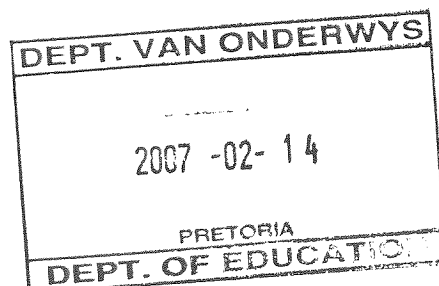
4.5   The **industrial area** at **D** on the **orthophoto** map enjoys a good location . Explain **two** factors favouring the location of the industry at this particular site.

- Flat land
- close to markets
- cheaper land on the outskirts
- pollution –   located away from the town.
- near raw material source   *any*   *2x2=(4)*
                                                                         [20]

TOTAL : 75

AFDELING A

VRAAG 1

MEERVOUDIGE KEUSEVRAE

Verwys na die 1: 50 000 topografiese kaart 3322CA en 3322CA ortofotokaart van Oudtshoorn en beantwoord die vrae wat volg:

Vir elk van die volgende stellings is **vier** alternatiewe voorsien. Skryf die letter van die korrekte antwoord van elke sub-vraag in die **blokkie** wat voorsien is aan die regterkant van die bladsy.

1.1   Die **ortofotokaart** se skaal is ... keer groter as die topografiese kaart se skaal.
         A   10
         B   20
         C   50   **D**
         D   5

1.2   Die **kontoerinterval** op die **topografiese** kaart is ... meter.
         A   30
         B   10
         C   20   **C**
         D   50

1.3   Die topografiese kaartnommer 3322 verwys na ...
         A   kontoere en isobare.
         B   isobare en kontoere.
         C   lengte- en breedtelyne.   **D**
         D   breedte- en lengtelyne.

1.4   Die voorwerp in ruit **B3** op die **topografiese** kaart is 'n ...
         A   isobaar.
         B   punthoogte.
         C   trigonometriese stasie.   **C**
         D   hoefystermeer.

1.5   Die **primêre ekonomiese aktiwiteit** by **E** (in ruit E12) op die **topografiese** kaart is ...
         A   bosbou.
         B   nywerhede.
         C   uitgrawings.   **C**
         D   opvoedkunding.

1.6   Die **sekondêre ekonomiese aktiwiteit** by **D** op die **ortofotokaart** is ...
        A   mynbou.
        B   nywerhede.   B
        C   boerdery.
        D   ontspanning.

1.7   Die nasionale pad wat De Rust en Oudtshoorn met mekaar verbind
        op die **topografiese** kaart is die ...
        A   N2.
        B   N12.   B
        C   R29.
        D   R62.

1.8   Die **grondgebruik** by **C** op die **ortofotokaart** is ...
        A   steenwerke.
        B   rioolwerke.   C
        C   'n hospitaal.
        D   'n skool.

1.9   Die Oudtshoornlughawe (in ruit **G12**) op die topografiese kaart is ... vanaf die
        SSK.

        A   noordwes
        B   suidoos   C
        C   suidwes
        D   noordoos

1.10   Kontoere, trigonometriese stasies, punthoogtes en hoogtemerke
        verteenwoordig almal ...
        A   lyne wat plekke met dieselfde hoogte verbind.
        B   plekke met dieselfde plantegroei.   C
        C   hoogte bo seevlak.
        D   lyne wat plekke met dieselfde tipe gesteente met mekaar
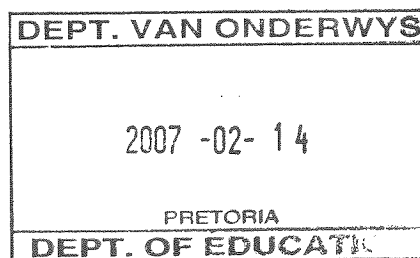   verbind.

                                                                    10x2=**(20)**

AFDELING B

VRAAG 2

KAARTWERKTEGNIEKE EN BEREKENINGE

2.1   Bereken die **lengte** van die Oudtshoornlandingstrook (in km)
        vanaf **P** na **Q** op die **topografiese kaart**.

        Kaartafstand   =   3cm   (1cm stel 0,5km voor)

        Grondafstand   =   3 x 0,5

                               =   *1,5km*   (4)

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2.2 Gee die verskil in hoogte tussen die punthoogte by die langste

Landingstrook van Oudtshoornlughawe (by **R**) en die lughawegeboue

(by **S**) op die ortofotokaart.

330 – 323 = 7m 1x2=(2)

2.3 Lokaliseer trigonometriese stasie **286**(**G** in ruit **E 14**) op Grootkop

en punthoogte **317**(**F** in ruit **G 15**) op die topografiese kaart.

    2.3.1 Bepaal die ware noord van punthoogte **317** vanaf

        trigonometriese stasie **286**.

        160° (aanvaar 155° tot 165°) 1x2=(2)

    2.3.2 Sal die magnetiese deklinasie vir 2006 groter of kleiner wees

        as 23° 34'W? Gee 'n rede vir jou antwoord.

        Antwoord : *Groter (2)*

        Rede : Deklinasie beweeg wes (2) 2x2=(4)

2.4 Bereken die **oppervlak**(in km²) van die gebied wat deur die ortofotokaart

beslaan word op die **topografiese** kaart.

Gebruik die formule: (**LENGTE x BREEDTE**)

    Lengte = 13,1cm   Breedte = 12cm

Oppervlakte = L x B

           = (13,1 x 0,5) X (12 x 0,5)

           =   6,55km X   6km

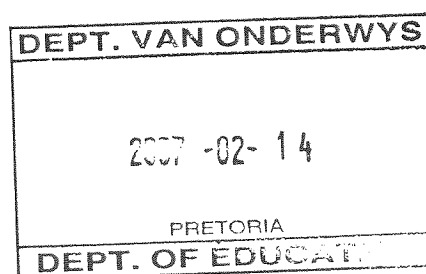   *= 39,3km²* (4)

2.5 **Benoem** die kenmerk wat by die volgende ruitverwysing voorkom

op die **topografiese** kaart.

33° 32' 45"S en 22° 10' 00"O.
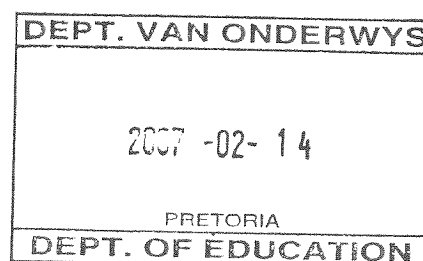
Kaffrarian Rifle Flats (2) 1x2=(2)

[18]

VRAAG 3
RELiëF EN DREINERING

3.1 Gee die **fisiese faktor** wat die bou van die lughawe van Oudtshoorn beïnvloed het op die **topografiese** kaart(ruit **G12**).
Gelyk oppervlak 1x2=(2)

3.2 Oor die grootste deel van die gekarteerde gebied is boerdery beperk.
3.2.1 Identifiseer **TWEE fisiese faktore** wat die boerdery beperk.
Heuwelagtige land (2)
Ongelyke oppervlak (2)
Gebrek aan gelyke oppervlak (2)
Baie nie-standhoudende riviere (2)
Siesoenale en onbetroubare reënval *[Enige TWEE]* 2x2=(4)

3.2.2 Verskaf enige **TWEE maatstawwe** wat die boere gebruik om water te bekom.
Vore (2)
Kanale (2)
Boorgate (2)
Damme (2) *[Enige TWEE]* 2x2=(4)

3.3 Identifiseer **stroompatroon I** (ruit **K/L 7**) op die **topografiese** kaart.
Dendrities 1x2=(2)

3.4.1 Gee **TWEE fisiese faktore** wat die uitbreiding van Oudtshoorn na die noordooste beperk.
Ongelyke oppervlak (2)
Heuwelagtige grond (2)
Baie riviere (2) *[Enige TWEE]* 2x2=(4)

3.4.2 Identifiseer die landvorm wat deur erosie gevorm is in ruit O12.
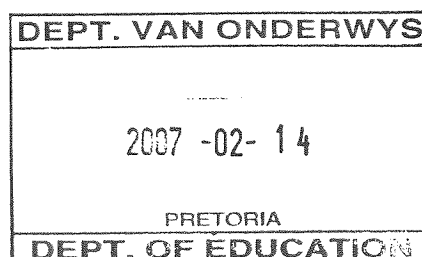*Waterval (1)* (1)
[17]

VRAAG 4

NEDERSETTING EN EKONOMIESE AKTIWITEITE

4.1   Gee **EEN** voorbeeld om aan te dui dat Oudtshoorn 'n

Geskiedkundige plek is.

St Jades Church 1868 (2)

Monumente (2)   [Enige EEN]   1x2=(2)

4.2   Verwys na die **diens** wat gelewer word **U** op die **ortofotokaart.**

4.2.1   Benoem die diens/aktiwiteit.

Rioolwerke (2)   1x2=(2)

4.2.2   Stel **TWEE** redes voor waarom dié diens in die landelik-stedelike oorgangsone

voorkom.

Slegte reuke (2)

Gelyk oppervlak (2)

Goedkoop grond (2)

Ver van die hoë inkomste gebied (2)   [Enige TWEE]   2x2=(4)

4.3   Die straatpatroon by **L** op die **topografiese** kaart is roosterpatroon.

Gee **EEN voordeel** van hierdie straatpatroon.

Verkort die afstand tussen twee punte (2)

Vergemaklik inkopies omdat winkels aan beide kante van die

straat geleë is (2)

Is maklik om uit te lê (2)

Is maklik om uit te brei (2)

Die patroon lewer vierkantige boupersele (2)   [Enige EEN]   1x2=(2)

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4.4   Deur van die kaart gebruik te maak, lys **DRIE** ontspanningsgeleenthede wat
       Oudtshoorn aan die **toeris** bied.

       Cango Grotte (2)

       Gholfbaan (2)

       Skietbaan (2)

       Skougronde (2)

       Toeristekamp (2)

       Krokodilplaas (2)

       Volstruisplaas (2)

       Ontspanningsgronde (2))

       Grey Stone wildsplaas (2)   *[Enige DRIE]*   3x2=(6)

4.5   Die **nywerheidsgebied D** op die **ortofotokaart** het 'n goeie ligging. Verduidelik
       TWEE faktore wat die nywerheid by hierdie ligging **bevoordeel**.

       Gelyk oppervlak (2)

       Naby die markte (2)

       Goedkoper grond aan die buitewyke (2)

       Besoedeling – ver van die dorp af (2)

       Naby die rou grondstof (2)   *[Enige TWEE]*   2x2=(4)

                                                                          [20]

                                                              TOTAAL: 75