KZN - DEPARTMENT OF EDUCATION

GREENBURY SECONDARY SCHOOL

FINAL EXAMINATION 2016

GEOGRAPHY P2

GRADE: 11
EXAMINER: D. RAMASAMI
MODERATOR: F. PARUK

DATE: 02/11/16
TIME: 1.5 HOURS
MARKS: 75

NAME:

GRADE/ DIV:

EDUCATOR

QUESTION	CONTENT	MARKS
ONE	Multiple choice questions	15
TWO	Map calculations	20
THREE	Map and photo interpretation	26
FOUR	Geographical Information System	14

MARKS:

75

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QUESTION ONE

MULTIPLE CHOICE QUESTIONS

The following questions are based on the 1:50 000 topographical map, as well as the orthophoto map. Various options are provided as possible answers to the following questions. Write down thye letter of the correct answer in the spaces provided..

1.1. The contour interval of the orthophoto map is ...

A) 5M
B) 10M
C) 20M
D) 15M

1.2. The map projection used on the topographical map is ...

A) Gauss Conform Projection
B) Lamberts Projection
C) Mercator
D) Universal Transverse.

1.3. Queenstown is found in the ....

A) Weatern Cape
B) KZN
C) Eastern Cape
D) Gauteng

1.4. The scale of the topographic map is ....than the topographic map

A) 5 times smaller
B) 5 times larger
C) 50 times smaller
D) 50 times larger

1.5. The type of rock found on the floodplains of Queenstown is

A) Igneous
B) Sedimentary
C) Metamorphic
D) None of the above

1.6. The latitudinal position of Queenstown is ....

A) 31° S
B) 26° E
C) 31° E
D) 26° S

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1.7.   The river at Q on the topographic map is a/an ..... river

       A) Perennial
       B) Non Perennial
       C) Episodic
       D) Exotic

1.8.   The road used to travel to East London in a South Easterly direction is a/an....

       A) National road
       B) Main road
       C) Secondary road
       D) Other road

1.9.   The orthophoto map is an example of a/an ...

       A) Vertical
       C) Oblique
       C) High oblique
       D) Low oblique

1.10.   The magnetic declination in 2016 will be ... than the MD for 2002.

       A) Smaller
       B) Bigger
       C) Same
       D) None of the above .

1.11.   The landuse 14 on the orthophoto map is ....

       A) Primary
       B) Secondary
       C) Tertiary
       D) Quartenary

1.12.   The land use 3 on the orthophoto map is a ....

       A) School
       B) factory
       C) Commercial
       D) Warehouse

1.13.   The slope at K on the topographic map is ....

       A) Steep
       B) Gentle
       C) Concave
       D) Convex

1.14. The relief of Queenstown prevents expansion in a/an .... direction

    A) Easterly
    B) Westerly
    C) South Westerly
    D) Northerly

                                                                  _____

1.15. Recreational feature 2 on the orthophoto map is a/an....

    A) Soccer field
    B) Golf Course
    C) Park
    D) Rugby field

                                                                  _____

                                                        (15 x 1)   **[15]**

QUESTION TWO
MAP CALCULATIONS

2.1. Calculate the average gradient between spot height 1192 (J3) and trig beacon 203 (G6) on the topographic map map..

                                                                             (4)

2.2. Using the topographic map, calculate the magnetic bearing of spot height 1192 (J3) from trig beacon 203 (G6) for 2002.

                                                                             (4)

2.3.   Refer to the orthophoto map and calculate the area in kms of the box labeled 1.
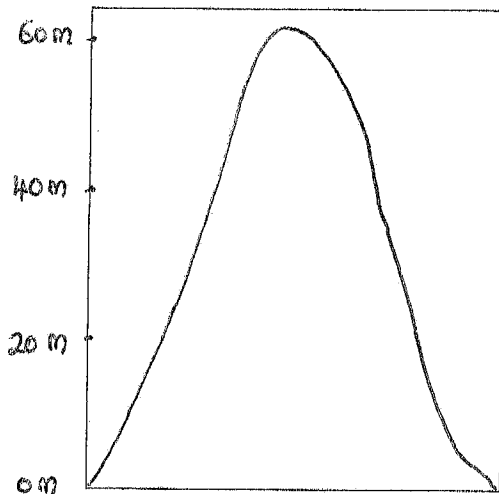
_____

_____

_____

_____

_____ (3)

2.4.   State the grid reference of the reservoir in G5 on the topographic map.

latitude_____

longitude_____ (4)

2.5.   Study the cross drawn from the topographic map section below and answer the questions

2.5.1. Calculate the vertical exaggeration of this cross section

_____

_____

_____

_____

_____

_____ (3)

2.5.2. State one importance of calculating vertical exaggeration.

_____

_____ (2)

[20]

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QUESTION 3

MAP AND PHOTO INTERPRETATION

3.1.1. Identify the feature represented by the number 10 on the orthophoto map

_____ (2)

3.1.2. State one economic advantage of this feature. (Answer 3.1.1.)

_____

_____ (2)

3.2.   Refer to the topographic map and orthophoto map:

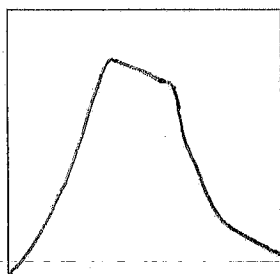3.2.1. State one factor favouring farming in the SW corner of the topographic map.   (   )

_____

_____ (2)

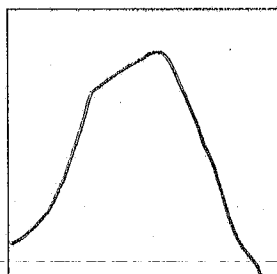3.2.2. Name two recreational activities that can be done in/on the Bonkolo dam (B8/C8)

_____

_____ (2)

3.2.3. State two measures that people in Queenstown put in place to cater for the low rainfall
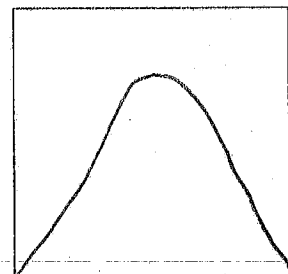
_____

_____ (2)

(   )

3.3.1. Which cross section, A, B, or C represents the cross section of Bonker'kop between points 7 and 8?

A   B   C

_____ (2)

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3.3.2. State the height of the trig beacon in D7.

_____ (2)

3.3.3. Refer to the topographic map and orthophoto map and identify the land use/ feature.

L (specify type) _____

S _____

U _____

9 _____

6 (type of slope) _____ (10)

3.3.4. State two reasons for the location of the sewage works in E4.

1. _____

2. _____ (2)

[26]

QUESTION 4

GEOGRAPHICAL INFORMATION SYSTEM

4.1. What is Geographical Information system?

_____ (2)

4.2. Differentiate between primary and secondary source of data

a) _____

_____

b) _____

_____ (4)

4.3. Give an example of primary data for a student doing research on crime of his area.

_____ (1)

4.4. Define and give an example of the following type of data.

Raster: _____

_____ (3)

Vector: _____

_____ (3)

4.5. Give an example of a polygon in G4

_____ (1)

[14]

TOTAL = 75

ROUGH WORK

QUESTION ONE

1.1.   B √   1.9.   A √

1.2.   A √   1.10.   B √

1.3.   C √   1.11.   A √

1.4.   A √   1.12.   A √

1.5.   B √   1.13.   C √

1.6.   A √   1.14.   D √

1.7.   B √   1.15.   B √

1.8.   A √

QUESTION TWO

2.1.   GR =   VI   :   HE √   OR   VI/HE

      = 1417.3 – 1192 m   : 14.2/2 km   (14.0- 14.4)

      = 225.3 m √   : 7.1km x1000   (7.0 – 7.2 km)

      =   : 7100 m √   (7000 – 7200)

      = 225.3/225.3   : 7100/225.3

      =   1   : 31.5 √   (31 – 32)

2.2.   TB = 180° + 44° √ = 220° √   (42° - 46°) = (221° - 226°)

     MB = TB + MD √

       = 220° + 24° 16'

       = 244° 16'√   (246° 16' - 250° 16')

2.3.   Area = L x B

    L   = 7.7 / 10 = 0.77 km √   (7.5 – 7.9)

    B   = 7.1 / 10 = 0.71 km √   (6.9 – 7.3)

    Area = 0.77 x 0.71 =0.55 km2 √   (0.52 – 0.58)

2.4.   Latitude - 31° 56' √ 23'' √ S   (20'' – 25'')

    Longitude - 26° 52' √ 19'' √ E   (17'' – 21'')

2.5.1. VE = VS/HS = 2cm rep 20m/1:50000 √ = 1cm rep 10m/1:50000 = 1:1000/1:50000 √

    = 50000/1000 = 50 times √

2.5.2. Allows us to study details of the cross section. √√

QUESTION THREE

3.1.1.　Road/ national road √

3.1.2.　Helps in transportation of goods and services √√

3.2.1.　Flat land, presence of water, transport√√

3.2.2.　Fishing √, swimming √ (any water sport)

3.2.3.　Reservoirs √, dams, furrows √

3.3.1.　A √√

3.3.2.　1468.9 √√

3.3.3.　L – river √√ *Non-perennial*

　　　　S – recreation/ sportsfield √√

　　　　9 – residential √√

　　　　U – railway line √√

　　　　6 – steep slope √√

3.3.4.　Flat land √

　　　　Away from residential area √

　　　　River

QUESTION FOUR

4.1.　The use of computer technology to study geographical data √√

4.2.　Primary – information collected by the user √√

　　　Secondary – using info researched by other people √√

4.3.　The student can interview residents in his area √

4.4.　Raster – information represented by means of pixels/grid cells √√ eg. Orthophoto map √

　　　Vector – Information represented by means of points lines and polygons √√

　　　eg. topographic map √

4.4.　Farm ,√ Dam