Province of the
EASTERN CAPE
EDUCATION

NATIONAL
SENIOR CERTIFICATE

GRADE 10

NOVEMBER 2020

GEOGRAPHY P2
(EXEMPLAR)

MARKS: 150

TIME: 3 hours

This question paper consists of 10 pages and an addendum of 9 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of TWO sections. SECTION A is theory and SECTION B is mapwork.

2. Answer ALL questions in this question paper.

3. All diagrams are included in the ADDENDUM.

4. Leave a line between subsections of questions answered.

5. Start EACH question on a NEW page.

6. Number the answers correctly according to the numbering system used in this question paper.

7. Number the answers in the centre of the line.

8. Do NOT write in the margins of the ANSWER BOOK.

9. Draw fully labelled diagrams when instructed to do so.

10. Answer in FULL SENTENCES, except where you are asked to state, name, identify or list.

11. Please refer to the topographical map and orthophoto map to answer QUESTION 3 (Mapwork).

12. Show ALL calculations and formulas, where applicable. Marks will be awarded for this.

13. Indicate the unit of measurement in the final answer of the calculations. Make sure that the units in ALL your calculations and final answer are retained.

14. You may use a non-programmable calculator.

15. The area delimited in BLACK on the topographical map represents the area covered by the orthophoto map.

16. A glossary of some English and Afrikaans words and their translations appear in the appendix.

17. Read ALL instructions carefully.

18. Write neatly and legibly.

SECTION A: POPULATION AND WATER RESOURCES

QUESTION 1: POPULATION

1.1   Match the term/concept in COLUMN B with the correct description in COLUMN A. Write ONLY the correct letter (A–I) next to the corresponding question numbers (1.1.1–1.1.8) in your ANSWERBOOK, for example, 1.1.9 K.

COLUMN A		COLUMN B	
1.1.1	Statistics indicating how population is changing	A	emigrants
1.1.2	People moving out of their own country to other countries for jobs	B	life expectancy
1.1.3	The very rapid increase in the country's population	C	population density
1.1.4	A graph showing population structure in terms of age and gender/sex	D	xenophobia
1.1.5	Migrants who are forced to move out of their country of origin owing to fear of persecution or natural disasters	E	population indicators
1.1.6	The number of people per square kilometre	F	population explosion
1.1.7	A strong sense of fear and dislike or fear of people from other countries	G	economic migrants
1.1.8	The expected average number of years people will live in a country	H	refugees
		I	population pyramid

(8 x 1)   (8)

1.2   Study FIGURE 1.2 A and B that shows two different population pyramids to answer the questions that follow. Write down the question number and the letter (A or B) that corresponds to the statements below, for example 1.2.9 B.

1.2.1   This is an early expanding population.

1.2.2   Children contribute to farm labour in this population.

1.2.3   There are more individuals who live for more than 75 years.

1.2.4   Death rate and birth rate are both high.

1.2.5   Medical facilities are of a high standard.

1.2.6   Most of such countries are found in Africa and Latin America.

1.2.7   Dependency ratio is low in this country.   (7 x 1)   (7)

1.3   Refer to FIGURE 1.3 (**A** and **B**) showing the world population distribution to answer the questions that follow.

    1.3.1   Define *population distribution*.   (1 x 1)   (1)

    1.3.2   From the maps and table in FIGURE 1.3A and B respectively, identify the continent that inhabits largest population.   (1 x 1)   (1)

    1.3.3   Name TWO countries with the world's largest population.   (2 x 1)   (2)

    1.3.4   Suggest TWO challenges a country with a large population may face.
                                                                                                            (2 x 2)   (4)

    1.3.5   Describe TWO physical factors that attract more people to live in an area.   (2 x 2)   (4)

    1.3.6   Identify a country with less population in FIGURE 1.3A and describe ONE challenge of such a country that has less population.   (1 + 2)   (3)

1.4   Refer to FIGURE 1.4 answer the questions that follow.

    1.4.1   Define *xenophobia*.   (1 x 1)   (1)

    1.4.2   Describe the impact of this xenophobic attack on the foreign nationals according to the information in the report.   (1 x 2)   (2)

    1.4.3   Name TWO groups that were concerned with the protection of foreign nationals in 2008 to stop blood shedding.   (2 x 1)   (2)

    1.4.4   Give TWO reasons why South Africans show their anger to people from other countries.   (2 x 2)   (4)

    1.4.5   Suggest ONE reason why xenophobic attacks continue to happen in South Africa despite the government, civic society and international organisations' attempts to stop it.   (1 x 2)   (2)

    1.4.6   Suggest ways in which violence between South Africans and foreign nationals can be reduced.   (2 x 2)   (4)

1.5   Study FIGURE 1.5 showing rural and urban population of South Africa (in millions).

    1.5.1   Define *rural population*.   (1 x 1)   (1)

    1.5.2   Does urban population decrease or increase from 1960 to 2016?
                    (1 x 1)   (1)

    1.5.3   Give a reason for the pattern you described in QUESTION 1.5.2 above.   (1 x 1)   (1)

    1.5.4   Using information on the graph, work out the urban population in 2015.   (1 x 2)   (2)

    1.5.5   State TWO push factors causing people to leave rural areas for urban areas.   (1 x 2)   (2)

    1.5.6   In a paragraph of approximately eight lines, explain the possible negative effects that will result in South Africa's cities if they continue receiving both local and international immigrants in large numbers.
                    (4 x 2)   (8)
                                    [60]

QUESTION 2: WATER RESOURCES

2.1 Refer to FIGURE 2.1, showing the water cycle.

    2.1.1 Choose the correct word in the brackets. Write ONLY the number and the correct word chosen from the brackets.

        (a) The larger percentage of the earth's water is found on the (atmosphere/earth's surface).

        (b) (Hail/Condensation) is a form of precipitation.

        (c) (Snow/Vapour) is water in a solid state. (3 x 1) (3)

    2.1.2 State the processes that are represented by the letters **A**, **B**, **C** and **D** in FIGURE 2.1 in the addendum. (4 x 1) (4)

2.2 Choose ONE word/phrase from the box that matches with the statements below.

> Ecosystem; marine pollution; desalination; overfishing; acidification; fish quotas; grey water; inter-basin transfer; sustainability

    2.2.1 The removal of salts from ocean water to make it more usable

    2.2.2 Used water that can still be used for other purposes

    2.2.3 Catching more fish than they reproduce therefore reducing their population

    2.2.4 Linked pipes transferring water from a high rainfall area to a dry area

    2.2.5 Using resources carefully to ensure their future availability

    2.2.6 Dumping of waste products in oceans

    2.2.7 The control in the numbers of fish which fishermen may catch

    2.2.8 The community where living and non-living things exist together

        (8 x 1) (8)

2.3 Refer to FIGURE 2.3 showing water problems in Cape Town, to answer the questions below.

2.3.1 Name the province that is affected by water shortage. (1 x 1) (1)

2.3.2 Provide the name of the campaign for water management that was launched in Cape Town. (1 x 1) (1)

2.3.3 According to the article, what is Day Zero? (1 x 2) (2)

2.3.4 Why does the people illustrated in the article look so desperate? (2 x 2) (4)

2.3.5 In a paragraph of approximately eight lines, provide strategies that the people of Cape Town and the municipalities of the region should implement to reduce water shortages. (4 x 2) (8)

2.4 Refer to FIGURE 2.4 that shows flooding in Port St Johns, Eastern Cape to answer the questions that follow.

2.4.1 What is a *flood*? (1 x 1) (1)

2.4.2 Name the type of flood that affected Port St Johns. (1 x 2) (2)

2.4.3 Explain why large portions of low-lying rural land settlements were left inaccessible (no-go-areas). (1 x 2) (2)

2.4.4 Describe the causes of floods such as the one shown on the article. (2 x 2) (4)

2.4.5 Explain the effects this flood caused to the people of Port St Johns as shown on the diagram. (2 x 2) (4)

2.4.6 Suggest ONE precautionary measure the people of Port St Johns could have taken to reduce the damages caused by this flood in their area. (1 x 2) (2)

2.5 Study FIGURE 2.5 that shows the change in the amount of Cape horse mackerel in South African waters.

2.5.1 What was the closing stock of mackerel in year 2013? (1 x 1) (1)

2.5.2 According to information on the graph, does the closing stock of mackerel increase or decrease from year 2005 to 2014? (1 x 1) (1)

2.5.3 State the year in which the closing stock of mackerel was the highest. (1 x 1) (1)

2.5.4 Calculate the difference of stock (in tonnes) between year 2005 and 2009. (1 x 2) (2)

2.5.5   Describe the benefits to South Africa, if the stock of Cape horse mackerel would continue to increase.   (1 x 2)   (2)

2.5.6   Suggest the possible reasons for the increase in the stock of mackerel and other fish stock.   (2 x 2)   (4)

2.5.7   Explain the negative results from overfishing of South Africa's coasts in the long run.   (2 x 2)   (4)

[60]

TOTAL SECTION A: 120

SECTION B: MAPWORK

QUESTION 3

3.1 **MAPWORK SKILLS AND CALCULATIONS**

3.1.1 Refer to the information of the magnetic declination at the bottom of the map and answer the following questions.

Calculate the magnetic declination for the present year. (5 x 1) (5)

3.1.2 Refer to block **I13** on the topographic map. That part of the map shows a railway line that is passing under a tunnel. Measure and write down the length of that tunnel in metres.

FORMULA: DISTANCE = CM x SCALE (2 x 1) (2)

3.1.3 Refer to the orthophoto map.

(a) What is the direction of the school, marked by letter **Q** from the shopping centre, marked by the letter **P**? (1 x 1) (1)

(b) Determine the true bearing of spot height **22** from trigonometrical beacon number **71**, both found in the area around point **P** on the orthophoto map. (2 x 1) (2)

3.2 **MAP AND PHOTO APPLICATION AND INTERPRETATION**

3.2.1 The types of transport one can use from Somerset West to Bellville, travelling north westerly are (air and water/road and rail). (1 x 1) (1)

3.2.2 Refer to the feature named PAARDEVLEI on the orthophoto map.

(a) Name the feature labelled PAARDVLEI. (1 x 1) (1)

(b) Explain the importance of such a water feature for people living around that area. (2 x 2) (4)

3.2.3 Refer to block **D4** on the topographic map together with the area on the top north-west part of the orthophoto map.

(a) State the main human activity dominant in that area. (1 x 1) (1)

(b) Describe ONE condition favourable for the development of the activity named in QUESTION 3.2.3 (a) above. (1 x 2) (2)

3.2.4 Refer to block **A10**.

Give ONE piece of evidence showing that nature conservation is a priority in Somerset West. (1 x 1) (1)

3.2.5 Using map evidence, justify why Somerset West can be described as a water scarce area. (2 x 1) (2)

3.3   **GEOGRAPHICAL INFORMATION SYSTEMS**

3.3.1   Name ONE example of a computer hardware component.   (1 x 1)   (1)

3.3.2   Describe the use of the hardware component named in
QUESTION 3.3.1 above.   (1 x 2)   (2)

3.3.3   Refer to block **F6** on the topographical map. Describe how a GIS spatial
analysis was used in relation to the activities found in that area.
(1 x 2)   (2)

3.3.4   Study the diagram (FIGURE 3.3.4) showing remote sensing, together
with your maps to answer the questions that follow.

(a)   Define *remote sensing*.   (1 x 1)   (1)

(b)   Explain why it was important for the surveyors to gather data
through remote sensing before the mapped area was developed.
(1 x 2)   (2)

[30]

TOTAL SECTION B: 30
TOTAL: 150