



Province of the
EASTERN CAPE
EDUCATION

NATIONAL SENIOR CERTIFICATE

GRADE 11

NOVEMBER 2012

GEOGRAPHY P1

MARKS: 300

TIME: 3 hours

This question paper consists of 14 pages and an annexure of 14 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of TWO sections, namely SECTION A and SECTION B.
2. Answer THREE questions to be chosen as follows:

ONE question from SECTION A
ONE question from SECTION B
A THIRD question from SECTION A or SECTION B
(Which has NOT been answered already.)
3. All diagrams are included in the ANNEXURE.
4. Leave a line between subsections 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. Do NOT write in the margins of the ANSWER BOOK.
8. Encircle the numbers of the questions that you have answered on the cover page of the ANSWER BOOK.
9. Where possible, illustrate your answer with labelled diagrams.
10. Write neatly and legible.
11. Mark allocation: If marks are given as follows – $3 \times 2 = 6$, it means that THREE facts should be given for TWO marks each.

If marks are given as follows – $3 \times 1 = 3$, it means that THREE facts should be given for ONE mark each.

Essay type questions must be answered in FULL SENTENCES. LISTING will result in marks being deducted.

SECTION A: PHYSICAL GEOGRAPHY: THE SIGNIFICANCE OF WATER AND ECOSYSTEMS

Answer at least ONE question from this section.

QUESTION 1 [LO 1.2 – LO 1.5] [LO 2.1 – LO 2.4] [LO 3.1 – LO 3.2]

- 1.1 Choose the correct term in brackets for each of the following descriptions. Write only the term next to the question number (1.1.1 – 1.1.5) for example 1.1.6 wave energy.

1.1.1 The water that flows over the land's surface into streams and rivers (infiltration/run-off) (2)

1.1.2 The generation of electricity from falling water (hydroelectric power/wave energy) (2)

1.1.3 A drowned river valley (fjord/ria) (2)

1.1.4 The grinding of pebbles and sand against the rocks because of wave action (hydraulic action/abrasion) (2)

1.1.5 Forms where sand is deposited in a shallow sea (sandbar/groyne) (2)

- 1.2 Match the correct term in COLUMN B with the description in COLUMN A. Write only the letter of the term from COLUMN B next to the question number (1.2.1 – 1.2.5) for example 1.2.6 X.

	COLUMN A	COLUMN B	
1.2.1	The natural place where a species or community lives	A	Biomass
1.2.2	A wide variety of species	B	Symbiosis
1.2.3	The feeding of one animal on another	C	Habitat
1.2.4	The interaction between living organisms in an ecosystem for food, light and shelter	D	Biodiversity
1.2.5	The transfer of food energy through connected food chains	E	Herbivore
		F	Predation
		G	Food chain
		H	Competition
		I	Food web
		J	Ecosystem

(5x2) (10)

- 1.3 Study the extract and accompanying map (FIGURE 1.3) to answer the following questions.
- 1.3.1 What is mariculture? (1x2) (2)
- 1.3.2 Describe the effect of pollutants on the mariculture industry in the area. (1x2) (2)
- 1.3.3 In what way can the mill threaten the tourist industry in this area? (1x2) (2)
- 1.3.4 What prevents the saltwater levels in the bay and lagoon from becoming too high? (1x2) (2)
- 1.3.5 Do you think the building of the ore-loading quay is likely to restrict the circulation of water in the bay? Justify your answer. (2x2) (4)
- 1.4 Study the extract and accompanying map (FIGURE 1.4) to answer the following questions.
- 1.4.1 Identify the large reservoir downstream of the Aswan Dam. (1x1) (1)
- 1.4.2 Describe the benefits of the annual flooding of the Nile River before the dam was built. (2x2) (4)
- 1.4.3 How would agriculture benefit from the building of the dam? (2x1) (2)
- 1.4.4 Write an essay (not more than 12 lines) on the negative impact the dam has on the environment as well as how the dam can be used to control the flooding of the Nile River. (6x2) (12)
- 1.5 Refer to the diagram (FIGURE 1.5) and answer the following questions.
- 1.5.1 Longshore drift occurs along Durban's beachfront. The beach is literally moving towards the south. Explain the process of longshore drift. (2x2) (4)
- 1.5.2 Describe the influence of longshore drift on:
- (a) The position of settlement (buildings) along the coast. (1x2) (2)
- (b) The tourism activities in the area. (1x2) (2)
- 1.5.3 Suggest a solution to the problem of longshore drift, without disturbing the local ecosystem. (1x1) (1)

- 1.6 Refer to the ecosystem (FIGURE 1.6) to answer the following questions.
- 1.6.1 Identify ONE biotic and ONE abiotic component in this ecosystem. (2)
 - 1.6.2 Give an example of a decomposer in this ecosystem. (1x2) (2)
 - 1.6.3 Explain the importance of decomposers in an ecosystem. (2x2) (4)
 - 1.6.4 What conditions are suitable for the process of decomposition? (2x2) (4)
 - 1.6.5 Identify a symbiotic relationship (interaction) in this ecosystem. (1x2) (2)
- 1.7 Study the extract (FIGURE 1.7) depicting the effects of human activities on ecosystems to answer the following questions.
- Write an essay (not more than 12 lines) on the negative effects of human activities on ecosystem by referring to:
- 1.7.1 Disrupting the food chain (2x2) (4)
 - 1.7.2 Poisoning the food chain (2x2) (4)
 - 1.7.3 Causing loss of habitat and biodiversity (2x2) (4)
- 1.8 Refer to the extract and accompanying diagram (FIGURE 1.8) to answer the following questions.
- 1.8.1 What do you think is taken out of an ecosystem? (1x2) (2)
 - 1.8.2 How does an ecosystem replace what is taken from it? (1x2) (2)
 - 1.8.3 Give examples of interactions in an ecosystem to maintain its balance. (2x2) (4)
 - 1.8.4 What will happen if too much is taken out of an ecosystem and not enough is put back to replace it? (2x2) (4)
 - 1.8.5 Give examples of human activities that can have a negative effect on the ecosystems ability to self-regulation. (2x1) (2)

[100]

QUESTION 2 [LO 1.2 – LO 1.5] [LO 2.1 – LO 2.4] [LO 3.1 – LO 3.2]

2.1 State whether the following statements are true or false. Write only True or False next to the question number (2.1.1 – 2.1.5) for example 2.1.6 True.

- 2.1.1 When a river empties into a lake or a wetland it forms an inland drainage basin. (2)
- 2.1.2 Lake Kariba is the smallest human-made lake in Africa. (2)
- 2.1.3 The foreshore is the part of the shore that lies between the low-tide and high-tide marks. (2)
- 2.1.4 A ria coast is an emerged river valley which always forms around an estuary or river mouth. (2)
- 2.1.5 A tombolo is a sandbar that forms behind an island close to the shore, linking the island to the shore. (2)

2.2 Select the missing word(s) from the list below to complete the following statements. Write only the word(s) next to the question number (2.2.1 – 2.2.5) for example, 2.2.6 Spring tide.

Indigenous; Organic; Exotic; Mineral; Salination; Logging; Siltation; Hunting; Deforestation; Poaching

- 2.2.1 The Protea is an example of a plant that is ... to the Fynbos biome. (2)
- 2.2.2 The cutting down of trees to use for wood is called ... (2)
- 2.2.3 ... matter is formed by decaying plant and animal material. (2)
- 2.2.4 ... saturates the soil in dry regions with salt making it unsuitable for agriculture. (2)
- 2.2.5 During civil wars in Africa endangered wildlife is ... for food and illegal trading. (2)

- 2.3 Study the diagrams **A** and **B** in FIGURE 2.3 depicting the temperature profile of the Tropical Pacific waters under different conditions to answer the following questions.
- 2.3.1 Which of the diagrams, **A** or **B**, represents El Nino conditions?(1x1) (1)
- 2.3.2 In which diagram, **A** or **B**, are the easterly winds stronger? (1x1) (1)
- 2.3.3 With reference to your answer in QUESTION 2.3.2, explain why the stronger easterly winds would benefit the fishing industry. (1x2) (2)
- 2.3.4 For which phenomenon, **A** or **B**, is Africa more likely to experience a drought? Justify your answer. (2x2) (4)
- 2.3.5 Write an essay (not more than 12 lines) to describe the effect of droughts on the farming activities in Africa and suggest measures African farmers can implement to prepare and reduce the effects of droughts. (6x2) (12)
- 2.4 Refer to the graphs (FIGURE 2.4) and answer the following questions.
- 2.4.1 Which town experiences the biggest difference between daily maximum and minimum temperatures? (1x1) (1)
- 2.4.2 Which town experiences the biggest difference between summer and winter temperatures? (1x1) (1)
- 2.4.3 What is the difference between the June maximum and minimum temperatures in:
- (a) Durban (1x2) (2)
- (b) Pietermaritzburg (1x2) (2)
- 2.4.4 Explain the difference in temperature between the two towns. (1x2) (2)
- 2.5 FIGURE 2.5 is a simple drawing of the Hole in the Wall in rural Transkei. Study the drawing and answer the following questions.
- 2.5.1 Was the Hole in the Wall formed by constructive or destructive waves? (1x1) (1)
- 2.5.2 Was the Hole in the Wall formed by deposition or erosion? (1x1) (1)
- 2.5.3 Identify the feature marked **A**. (1x2) (2)
- 2.5.4 What will eventually happen to the Hole in the Wall after a long period of weathering? (1x2) (2)
- 2.5.5 The Hole in the Wall is a tourist attraction. List TWO positive effects of tourism in this area. (2x2) (4)

2.6 Study the soil profile (FIGURE 2.6) and answer the following questions.

- | | | | |
|-------|---|-------|-----|
| 2.6.1 | Which horizon contains the parent rock? | (1x2) | (2) |
| 2.6.2 | In which horizon do all plants have their roots? | (1x2) | (2) |
| 2.6.3 | Which horizon is prone to erosion? | (1x2) | (2) |
| 2.6.4 | Which horizon is soil-like, but contains no humus? | (1x2) | (2) |
| 2.6.5 | Identify the processes marked A and B . | (2x1) | (2) |
| 2.6.6 | Which process, A or B , is more likely to affect the soil in the Tropical rain forest of the Congo? | (1x2) | (2) |
| 2.6.7 | Name the problem caused by the process at B . | (1x2) | (2) |
| 2.6.8 | A farmer heavily fertilises the soil on his farm with phosphate or nitrate fertilisers. What could be the effect on the water cycle and water ecosystems? | (3x2) | (6) |

2.7 Read the extract on the Grassland Biome (FIGURE 2.7) and answer the following questions.

- | | | | |
|-------|---|-------|------|
| 2.7.1 | Where in South Africa is the grassland biome found? | (1x2) | (2) |
| 2.7.2 | What are the names of the grassland regions in South America and North America respectively? | (2x1) | (2) |
| 2.7.3 | Why does the grassland biome have few or no trees? | (1x2) | (2) |
| 2.7.4 | Why is the grassland biome good for farming? | (1x2) | (2) |
| 2.7.5 | What caused the destruction of large parts of this biome? | (2x1) | (2) |
| 2.7.6 | Write an essay (not more than 12 lines) to explain the advantages of veldfires to this biome and suggest ways to address the destruction of the grassland biome by veldfires. | (6x2) | (12) |

[100]

HUMAN GEOGRAPHY: PEOPLE AND THEIR NEEDS**SECTION B: DEVELOPMENT, SUSTAINABILITY, PEOPLE AND THEIR NEEDS**

Answer at least ONE question from this section.

QUESTION 3 [LO 1.2 – LO 1.5] [LO 2.1 – LO 2.4] [LO 3.1 – LO 3.2]

- 3.1 Complete the following paragraph by filling in the missing word. Write only the missing word next to the question number (3.1.1 – 3.1.5) for example 3.1.6 Recycle

...3.1.1... resources are found in the physical environment and when used in their natural state are called ...3.1.2... materials. (2x2) (4)

...3.1.3... resources are the skills and knowledge that humans can contribute whilst ...3.1.4... resources are the capital needed to extract or use the resources from the physical environment. (2x2) (4)

...3.1.5... resources are the resources that cannot be re-formed in nature as fast as they are used up. (1x2) (2)

- 3.2 The following statements are false. Correct each statement and write the answer next to the question number (3.2.1 – 3.2.5) for example, 3.2.6 GDP stands for Gross Domestic Product (True).

3.2.1 Quaternary activities include all the primary, secondary and tertiary activities. (2)

3.2.2 The UN is all the developing countries assisting with aid. (2)

3.2.3 One of the Millennium Development Goals to be achieved by 2015 is to increase extreme poverty and hunger. (2)

3.2.4 Urban development involves providing a better life for people working and living in rural areas. (2)

3.2.5 Gender inequality is when men and women have equal conditions for realising their potential to contribute towards and benefit from development. (2)

- 3.3 Refer to the cartoon (FIGURE 3.3) depicting differences in global development to answer the following questions.
- 3.3.1 Define the Brandt Line. (1x2) (2)
- 3.3.2 With reference to your answer in QUESTION 3.3.1 and the cartoon, distinguish between developed and developing countries. (2x2) (4)
- 3.3.3 Refer to the cartoon and indicate which symbols and words represent developed and which represent developing countries respectively. (2x2) (4)
- 3.3.4 Identify TWO development indicators represented in the cartoon. (2x2) (4)
- 3.3.5 What message about the global economy do you read in the cartoon? (1x2) (2)
- 3.3.6 Refer to Brandt's Report to justify your answer in QUESTION 3.3.5. (1x2) (2)
- 3.4 Refer to the extract depicting rural development (FIGURE 3.4) to answer the following questions.
- 3.4.1 Explain what is meant by rural development. (1x2) (2)
- 3.4.2 Where is Qumbu situated? (1x1) (1)
- 3.4.3 Name the type of economic activity that the development programme aims to improve. (1x1) (1)
- 3.4.4 Name TWO factors that slows down the development of Qumbu. (2x2) (4)
- 3.4.5 Explain the approach the programme used to improve development in Qumbu. (1x2) (2)
- 3.4.6 Write an essay (not more than 12 lines) to explain why women in this rural area are being uplifted and how does the programme aim to improve the situation for women. (6x2) (12)

- 3.5 Study the extract and accompanying diagram depicting land use conflicts in national parks (FIGURE 3.5) to answer the following questions.
- 3.5.1 Refer to the diagram and give reasons why local communities are in conflict with national parks. (2x2) (4)
- 3.5.2 Explain how an increase in visitors and tourists to the national parks has a negative impact on the environment. (2x2) (4)
- 3.5.3 Write an essay (not more than 12 lines) to explain the importance of establishing of national parks and the opportunities national parks can create for local communities. (6x2) (12)
- 3.6 Refer to FIGURE 3.6 depicting how coal mining harms the environment to answer the following questions.
- 3.6.1 Identify the type of mining method used in the diagram. (1x2) (2)
- 3.6.2 Is coal a renewable or non-renewable energy source? Give a reason for your answer. (2x1) (2)
- 3.6.3 Refer to the diagram and name the process whereby:
- (a) Rainwater enters the groundwater sources (1x2) (2)
- (b) Rainwater land in rivers and lakes (1x2) (2)
- 3.6.4 List TWO negative results that coal mining has on the environment. (2x2) (4)
- 3.6.5 Suggest measures mining companies can implement to rehabilitate the environment after extracting the coal ore. (2x2) (4)
- 3.6.6 “Environmentalists are of the opinion that the environment cannot be fully rehabilitated after the extraction of the ore ...” Justify the statement. (2x2) (4)
- [100]**

QUESTION 4 [LO 1.2 – LO 1.5] [LO 2.1 – LO 2.4] [LO 3.1 – LO 3.2]

4.1 Give ONE word for the following statements. Write down only the word next to the question number (4.1.1 – 4.1.5) for example 4.1.6 Deforestation.

4.1.1 The reduction or using up of resources as the demand for resources increase (2)

4.1.2 The use of renewable resources in an uncontrolled way that does not allow them time to regenerate after being used (2)

4.1.3 The controlled and sensible use of resources to make sure that future generations will have access to enough resources to ensure their own survival (2)

4.1.4 The process to ensure that natural species do not become extinct (2)

4.1.5 The repeated use of waste or resources that can be broken down and made up afresh (2)

4.2 Complete the following paragraph by filling in the missing word(s). Write only the missing word(s) next to the question number (4.2.1 – 4.2.5) for example 4.2.6 Globalisation

4.2.1 ... is a continuous process of economic, social and environmental growth, which improves the quality of life of the people of a country. (2)

4.2.2 ... are used to compare the level of development between different countries. (2)

4.2.3 ... is used to measure the human development of the people of a country. (2)

4.2.4 ... compare the social well-being of a country taking into account employment rate, family life, etc. (2)

4.2.5 ... measures how people's lives are positively or negatively affected by the different aspects of the environment in which they live. (2)

4.3 Study the cartoon (FIGURE 4.3) to answer the following questions.

4.3.1 Explain the significance of the cartoon by referring to:

(a) The core-periphery model (2x2) (4)

(b) The dependency model (2x2) (4)

4.3.2 Do you agree with what the cartoon says about the G8 countries?

What implications does this have for the developing countries?
(3x2) (6)

4.3.3 When and where did the conference take place? (2x1) (2)

4.3.4 What was the agenda of the conference? (1x2) (2)

4.4 Read the article (FIGURE 4.4) to answer the following questions.

4.4.1 Define the term *globalisation*. (1x2) (2)

4.4.2 Refer to the article and state ONE factor that influenced the process of globalisation. (1x2) (2)

4.4.3 Why are southern countries in a poverty trap? (1x2) (2)

4.4.4 Is the economic path followed in the article globally sustainable? Account for your answer. (2x2) (4)

4.4.5 Write an essay (not more than 12 lines) to explain the positive and the negative impacts of globalisation to the poor countries in the south. (6x2) (12)

4.5 Refer to the pie graph on deforestation (FIGURE 4.5) to answer the following questions.

4.5.1 What contribution does developed countries in the south make to world deforestation? Justify your answer. (2x2) (4)

4.5.2 Which developing region makes the smallest contribution to world deforestation? (1x2) (2)

4.5.3 List socio-economic factors that could cause deforestation in Africa. (3x2) (6)

4.5.4 Describe the impact of deforestation on the soil in Africa. (1x2) (2)

4.5.5 What can be done to reduce the impact of deforestation in Africa? (2x2) (4)

4.6 Read the extract (FIGURE 4.6) to answer the following questions.

- | | | | |
|-------|---|-------|--------------|
| 4.6.1 | Why is wind-generated energy classified as a renewable energy source? | (1x1) | (1) |
| 4.6.2 | Why is the word 'clean' used to describe this type of electricity? | (1x2) | (2) |
| 4.6.3 | Where is the wind farm depicted in the extract? | (1x1) | (1) |
| 4.6.4 | Explain how wind energy will be generated at the wind farm. | (2x2) | (4) |
| 4.6.5 | Explain what a 'green' power supply means. | (1x2) | (2) |
| 4.6.6 | Write an essay (not more than 12 lines) to describe the advantages and disadvantages of wind-generated electricity. | (6x2) | (12) |
| | | | [100] |

GRAND TOTAL: 300