



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

GEOGRAPHY P1

NOVEMBER 2013

MARKS: 300

TIME: 3 hours

This question paper consists of 11 pages and a 12-page annexure.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions.
2. Answer ANY THREE questions of 100 marks each.
3. ALL diagrams are contained in the ANNEXURE.
4. Leave a line between subsections of questions answered.
5. Start EACH question at the top of 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 your ANSWER BOOK.
8. ENCIRCLE the numbers of the questions that you have answered on the front page of your ANSWER BOOK.
9. Where possible, illustrate your answers with labelled diagrams.
10. Write clearly and legibly.

SECTION A: CLIMATE AND WEATHER, FLUVIAL PROCESSES AND STRUCTURAL LANDFORMS

Answer at least ONE question from this section. If you answer only ONE question from SECTION A, you must answer BOTH questions in SECTION B.

QUESTION 1

- 1.1 Study FIGURE 1.1 which shows global atmospheric pressure belts and winds, and answer the questions that follow.
- 1.1.1 What name is given to the winds that converge at **A**? (1 x 2) (2)
- 1.1.2 Is the 0° latitude a low- or a high-pressure belt? (1 x 2) (2)
- 1.1.3 Give the name of the boundary at 60° where two air masses with different characteristics meet. (1 x 2) (2)
- 1.1.4 State the name of pressure belt **C**. (1 x 2) (2)
- 1.1.5 What is the name of the pressure belt located at the 0° latitude? (1 x 2) (2)
- 1.2 Refer to FIGURE 1.2 which shows the profile of a river meander. Indicate whether the statements below apply to slope **X** or slope **Y**. Write only 'slope X' or 'slope Y' next to the question number (1.2.1–1.2.5) in the ANSWER BOOK.
- 1.2.1 The slope has a concave shape. (1 x 2) (2)
- 1.2.2 This slope has a gentle gradient. (1 x 2) (2)
- 1.2.3 The water flows faster against this slope. (1 x 2) (2)
- 1.2.4 Deposition takes place mainly on this slope. (1 x 2) (2)
- 1.2.5 This slope is known as the slip-off slope. (1 x 2) (2)
- 1.3 Study FIGURE 1.3 based on city climate.
- 1.3.1 Calculate the difference in temperature between the city centre and the farmland. (1 x 2) (2)
- 1.3.2 Give TWO reasons from the diagram why this temperature difference occurs. (2 x 2) (4)
- 1.3.3 Give the term used to describe the warm air over the city centre. (1 x 2) (2)
- 1.3.4 Explain why the shape of the pollution dome is not the same during the day and night. (2 x 2) (4)
- 1.3.5 Refer to the pollution dome over the city and give evidence to support the statement that this is a daytime situation. (1 x 2) (2)

- 1.4 Read FIGURE 1.4 based on cyclone Irina and answer the questions that follow.
- 1.4.1 How many cyclones, including Irina, have occurred so far in this tropical cyclone season? (1 x 2) (2)
- 1.4.2 What evidence on the satellite image suggests that Irina is a tropical cyclone? (1 x 2) (2)
- 1.4.3 Name the cloud type around the eye at **C**. (1 x 2) (2)
- 1.4.4 Explain TWO conditions necessary for the formation of tropical cyclones. (2 x 2) (4)
- 1.4.5 Explain why people in KwaZulu-Natal would not have been prepared for the chaos created by tropical cyclone Irina. Give TWO reasons. (2 x 2) (4)
- 1.4.6 Write a paragraph (approximately 12 lines) explaining the impact that the flooding caused by Irina would have on the economy and environment of KwaZulu-Natal. (6 x 2) (12)
- 1.5 FIGURE 1.5 is based on a drainage basin and its longitudinal profile.
- 1.5.1 Define the term *drainage basin*. (1 x 2) (2)
- 1.5.2 Explain the term *longitudinal profile*. (1 x 2) (2)
- 1.5.3 What evidence suggests that the longitudinal profile is a graded profile? (1 x 2) (2)
- 1.5.4 Name and describe the underlying rock structure associated with stream pattern **B**. (2 x 2) (4)
- 1.5.5 Determine the stream order at point **C**. (1 x 2) (2)
- 1.5.6 Give a reason why the river follows a meandering path in the middle course. (1 x 2) (2)
- 1.5.7 The fluvial landforms in the upper and lower course of a river differ greatly. Write a paragraph (approximately 12 lines) in which you explain how the different stream-flow and erosion processes are responsible for the development of different landforms in the upper and lower courses. (6 x 2) (12)
- 1.6 Refer to the sketches in FIGURE 1.6 and answer the questions that follow.
- 1.6.1 Describe the shape of landform **A**. (1 x 2) (2)
- 1.6.2 State the drainage pattern that could form on landform **A**. (1 x 2) (2)
- 1.6.3 Explain why the drainage pattern in QUESTION 1.6.2 will develop on landform **A**. (2 x 2) (4)
- 1.6.4 Explain how feature **B** develops. (3 x 2) (6)

[100]

QUESTION 2

- 2.1 Refer to FIGURE 2.1 showing tertiary air circulation. Choose the correct word in brackets to make each of the following statements TRUE. Write down only the correct word next to the question number (2.1.1–2.1.5) in the ANSWER BOOK, for example 2.1.6 berg wind.
- 2.1.1 The wind at **D** is a (land/sea) breeze. (1 x 2) (2)
- 2.1.2 Wind **E** occurs at (night/day) time. (1 x 2) (2)
- 2.1.3 Place **C** is likely to experience a (high/low) pressure. (1 x 2) (2)
- 2.1.4 The air flow at **B** will have a (warming/cooling) effect on the land. (1 x 2) (2)
- 2.1.5 The high pressure at **A** is due to (subsiding/rising) air. (1 x 2) (2)
- 2.2 FIGURE 2.2 shows sedimentary strata/layers.
- 2.2.1 How are the strata/layers in **A** positioned in relation to the earth's surface? (1 x 2) (2)
- 2.2.2 Which rock type, shale or limestone, is likely to erode faster? (1 x 2) (2)
- 2.2.3 How are the strata/layers in **B** positioned in relation to the earth's surface? (1 x 2) (2)
- 2.2.4 Name ONE landform that originates from the limestone in sketch **B**. (1 x 2) (2)
- 2.2.5 What is the name of the steep slope at **C**? (1 x 2) (2)
- 2.3 Study the synoptic weather map/chart in FIGURE 2.3 and answer the questions that follow.
- 2.3.1 Name the type of low-pressure cell at **B**. (1 x 2) (2)
- 2.3.2 State the pressure at the centre of pressure cell **D**. (1 x 2) (2)
- 2.3.3 Identify ONE piece of evidence from the synoptic map/chart to indicate that it represents winter conditions. (1 x 2) (2)
- 2.3.4 Name the front at **C**. (1 x 2) (2)
- 2.3.5 State TWO weather changes that Port Elizabeth could possibly experience in the next few hours. (2 x 2) (4)
- 2.3.6 Write a paragraph (approximately 12 lines) explaining why Port Elizabeth is experiencing unusually high temperatures and what impact the weather conditions will have on the environment. (6 x 2) (12)

- 2.4 Examine the cartoon in FIGURE 2.4 on global warming.
- 2.4.1 Define the term *global warming*. (1 x 2) (2)
- 2.4.2 Comment on the argument between the developed nations (countries) and the big developing nations (countries) evident in the cartoon. (2 x 2) (4)
- 2.4.3 Why is there a fire around the earth in the cartoon? (1 x 2) (2)
- 2.4.4 What is the collective name for gases that cause global warming? (1 x 2) (2)
- 2.4.5 Explain why the cartoonist Zapiro thinks COP 17 was a waste of time. (2 x 2) (4)
- 2.5 Study FIGURE 2.5, which shows the impact of land-use on flow hydrographs.
- 2.5.1 Define the term *flow hydrograph*. (1 x 2) (2)
- 2.5.2 How can humans use the information on a flow hydrograph? (1 x 2) (2)
- 2.5.3 Explain why peak rainfall and peak discharge do not occur at the same time. (2 x 2) (4)
- 2.5.4 Which land-use results in the highest peak discharge? (1 x 2) (2)
- 2.5.5 Discuss the impact of forests on river discharge. (2 x 2) (4)
- 2.6 Refer to the sketches on slopes and the mass movements along slopes in FIGURE 2.6.
- 2.6.1 Name slope elements/forms **X** and **Y** in sketch **A**. (2 x 2) (4)
- 2.6.2 Describe the shape of slope **X**. (1 x 2) (2)
- 2.6.3 State the typical slope element/form not visible in sketch **A**. (1 x 2) (2)
- 2.6.4 Discuss how slope **Y** can be used by people. (2 x 2) (4)
- 2.6.5 Explain why slope **D** became unstable. (2 x 2) (4)
- 2.6.6 Write a paragraph (approximately 12 lines) analysing the impact of slope instability and methods that can be used to prevent disasters associated with this instability. (6 x 2) (12)
- [100]**

SECTION B: PEOPLE AND PLACES: RURAL AND URBAN SETTLEMENT, PEOPLE AND THEIR NEEDS

Answer at least ONE question from this section. If you answer ONE question from SECTION B, you must answer BOTH questions in SECTION A.

QUESTION 3

3.1 Refer to FIGURE 3.1 showing types of settlements. Match the descriptions below with the letters (A–E) in the sketch. You may use the same letter for more than one answer.

- 3.1.1 A settlement with a linear shape (1 x 2) (2)
- 3.1.2 A settlement located away from water, as it is a threat (1 x 2) (2)
- 3.1.3 An isolated farmstead (1 x 2) (2)
- 3.1.4 A settlement where farmers live in the village and not on their farms (1 x 2) (2)
- 3.1.5 A settlement where a river meander provides protection from invasions (1 x 2) (2)

3.2 Choose a description from COLUMN B that matches the word(s)/term(s) in COLUMN A. Write only the letter (A–F) next to the question number (3.2.1–3.2.5) in the ANSWER BOOK.

COLUMN A		COLUMN B	
3.2.1	Primary activity	A	a plan for social development
3.2.2	Tertiary activity	B	provision of intellectual services/high-level research
3.2.3	Quaternary activity	C	provision of services
3.2.4	Sustainability	D	strategy to improve industrial development
3.2.5	Reconstruction and Development Plan (RDP)	E	involves the exploitation of natural resources
		F	involves conservation for future generations

(5 x 2) (10)

- 3.3 Refer to FIGURE 3.3 based on population movements between settlements.
- 3.3.1 Name movement **A** in the sketch. (1 x 2) (2)
- 3.3.2 Give ONE reason why people move away from rural villages. (1 x 2) (2)
- 3.3.3 Discuss the impact of the movement of people away from rural villages on the economy of these settlements. (3 x 2) (6)
- 3.3.4 Is movement **B** more likely to take place in developed or developing countries? (1 x 2) (2)
- 3.3.5 Write a paragraph (approximately 12 lines) detailing the impact of movement **A** on the CBD (**D**) and inner city (**C**). (6 x 2) (12)
- 3.4 Study the cartoon on an urban problem in FIGURE 3.4.
- 3.4.1 State the urban problem highlighted in the cartoon. (1 x 2) (2)
- 3.4.2 What message does the cartoon convey about the drivers' attitude? (1 x 2) (2)
- 3.4.3 Discuss how the drivers' attitude contributed to the problem. (2 x 2) (4)
- 3.4.4 State TWO environmental issues associated with this urban problem. (2 x 2) (4)
- 3.4.5 Give the local authority advice on how they can help solve this urban problem. (3 x 2) (6)
- 3.5 Study the graph in FIGURE 3.5 showing the GDP contribution to the economy of South Africa.
- 3.5.1 Write the acronym GDP in full. (1 x 2) (2)
- 3.5.2 Briefly explain why finance displays such an erratic/changing trend. (3 x 2) (6)
- 3.5.3 Write a paragraph (approximately 12 lines) commenting on the contribution of manufacturing to the GDP over the last five years, and how this has led to the growth of the economy of South Africa. (6 x 2) (12)

- 3.6 Study FIGURE 3.6 which shows the location of some industrial development zones (IDZs) in South Africa.
- 3.6.1 What is an *industrial development zone*? (1 x 2) (2)
 - 3.6.2 Which IDZ has the largest investment to date? (1 x 2) (2)
 - 3.6.3 Give TWO reasons for the development of IDZs by the government. (2 x 2) (4)
 - 3.6.4 Name TWO incentives that government offers to industries that are established in IDZs. (2 x 2) (4)
 - 3.6.5 Explain how IDZs have improved the lives of people living in underdeveloped rural areas. (3 x 2) (6)
- [100]**

QUESTION 4

- 4.1 Choose a term from COLUMN B that matches a description in COLUMN A. Write only the letter (A–F) next to the question number (4.1.1–4.1.5) in the ANSWER BOOK.

COLUMN A		COLUMN B	
4.1.1	An increasing percentage of people that live in cities	A	counter-urbanisation
4.1.2	The process whereby people move out of cities to rural areas	B	urban sprawl
4.1.3	The physical growth of an urban settlement	C	urbanisation
		D	rural depopulation
4.1.4	Uncontrolled growth of an urban area	E	urban expansion
4.1.5	A decrease in the number of people living in rural areas	F	urban growth

(5 x 2) (10)

- 4.2 Give ONE word/term for each of the following descriptions. Write only the word/term next to the question number (4.2.1–4.2.5) in the ANSWER BOOK.
- 4.2.1 The exchange of goods and services between countries (1 x 2) (2)
 - 4.2.2 Goods that are brought into a country (1 x 2) (2)
 - 4.2.3 A financial statement showing the value of a country's transactions with other countries (1 x 2) (2)
 - 4.2.4 The difference in value between a country's imports and exports (1 x 2) (2)
 - 4.2.5 When the value of a country's exports is greater than its imports (1 x 2) (2)

- 4.3 Examine the cartoon in FIGURE 4.3 on illegal immigrants and answer the questions that follow.
- 4.3.1 Who is an *illegal immigrant*? (1 x 2) (2)
- 4.3.2 Comment on the government's attitude to illegal immigrants with reference to the cartoon. (2 x 2) (4)
- 4.3.3 Give TWO reasons why people all over the world want illegal immigration to be stopped. (2 x 2) (4)
- 4.3.4 Give TWO reasons why South Africa attracts such a large number of illegal immigrants from other African countries. (2 x 2) (4)
- 4.4 Study the map in FIGURE 4.4, which shows countries with the highest number of HIV/Aids-related deaths.
- 4.4.1 Name the country with the highest number of HIV/Aids-related deaths. (1 x 2) (2)
- 4.4.2 Give any TWO reasons for the high number of HIV/Aids-related deaths in Africa. (2 x 2) (4)
- 4.4.3 Give any TWO solutions that would reduce the number of HIV/Aids-related deaths. (2 x 2) (4)
- 4.4.4 Study the projected deaths up to 2015 and comment on the effectiveness of programmes to reduce HIV/Aids-related deaths. (2 x 2) (4)
- 4.4.5 Write a paragraph (approximately 12 lines) detailing the economic and social impact of HIV/Aids on rural settlement patterns in African countries. (6 x 2) (12)
- 4.5 Read the newspaper article entitled 'Formal sector sheds (loses) jobs' in FIGURE 4.5.
- 4.5.1 What does the *formal sector* refer to? (1 x 2) (2)
- 4.5.2 Give TWO reasons for the shift in the number of jobs from the formal to the informal sector. (2 x 2) (4)
- 4.5.3 Which industry lost the largest number of jobs? (1 x 2) (2)
- 4.5.4 Why is the change in jobs from the formal to the informal sector not good for the economy of South Africa? (1 x 2) (2)
- 4.5.5 Discuss THREE challenges for the informal sector in South Africa. (3 x 2) (6)

- 4.6 Study the graph in FIGURE 4.6 based on South Africa's trade with China.
- 4.6.1 Did South Africa have a favourable or unfavourable balance of trade with China between 2008 and 2012? (1 x 2) (2)
- 4.6.2 With reference to your answer to QUESTION 4.6.1, how did South Africa's balance of trade with China affect the economy of South Africa? (1 x 2) (2)
- 4.6.3 Identify TWO trends/patterns evident on the graph in the trade relationship between South Africa and China between 1995 and 2015. (2 x 2) (4)
- 4.6.4 Give TWO possible reasons for the greater difference in imports and exports between South Africa and China from 2008 to 2015. (2 x 2) (4)
- 4.6.5 Write a paragraph (approximately 12 lines) evaluating the advantages and disadvantages of South Africa's trade with global economies such as China. (6 x 2) (12)
- GRAND TOTAL: 300**
- [100]**