Education and Sport Development

Department of Education and Sport Development
Departement van Onderwys en Sportontwikkeling
Lefapha la Thuto le Tlhabololo ya Metshameko
NORTH WEST PROVINCE

PROVINCIAL ASSESSMENT

GRADE 12

GEOGRAPHY

JUNE EXAMINATION 2019

MARKS: 225

TIME: 3 hours

This question paper consists of 10 pages

INSTRUCTIONS AND INFORMATION

1. This question paper consists of THREE questions.
2. Answer ALL THREE questions of 75 marks each for a total of 225 marks
3. All diagrams are included in the ANNEXURE.
4. Leave a line between subsections of each question 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. Draw fully labelled diagrams when instructed to do so. NO marks will be awarded to diagrams that are not labelled or do not have a title.
8. Use appropriate GEOGRAPHICAL terminology where applicable.
9. The mark allocation is as (2x1) means that TWO facts are required for ONE mark each. (2x2) means that TWO facts are required for TWO marks each.
10. Units of measurement MUST be indicated in your final answers, e.g. 1 020hpa, 14ºc and 45m.
11. Answer in FULL SENTENCES, if words/action verbs like DISCUSS, DEFINE, EXPLAIN, COMMENT. EVALUATE, JUSTIFY, SUGGEST and SUBSTANTIATE are used in a question.
12. If words/ action verbs like NAME, IDENTIFY, PROVIDE, CLASSIFY,LIST, GIVE are used in a question, ONE word answers are acceptable.
13. Answer ALL paragraphs in FULL SENTENCES, NO marks will be allocated to single words/terminologies/concepts or phrases.
14. Answer ALL paragraphs in FULL SENTENCES, NO marks will be awarded to responses that are presented in a bullet (*) format.
15. Write neatly and legibly.

QUESTION ONE (CLIMATE, WEATHER AND GEMORPHOLOGY)

1.1. Study figure 1.1 based on weather stations. Write ONLY A or B next to the question number (1.1.1-1.1.7) in the ANSWER BOOK.

1.1.1. At which weather station is the dew point temperature the highest?

1.1.2. Where will the pressure gradient be the weakest?

1.1.3. Name the weather station where the atmospheric temperature is likely to be the lowest.

1.1.4. Will stratus clouds be more likely to form at weather station A, or B?

1.1.5. Is weather station A or B more representative of the warm sector of a mid-latitude cyclone?

1.1.6. At which station is the wind blowing towards the north east.

1.1.7. Name the weather station most likely to be found over the interior of South Africa

(7x1) (7)

1.2. Refer to FIGURE 1.2. and give the correct letter/term that matches the geomorphological description in the following statements. Write only the letter term next to the question number (12.1-1.2.8.)

1.2.1. The drainage pattern at A.

1.2.2. The drainage pattern where the main stream has a 90º bend.

1.2.3. The drainage pattern at B.

1.2.4. The drainage pattern which forms on igneous rock that has joints and cracks.

1.2.5. Identify the drainage pattern which resembles the branches of a tree.

1.2.6. Name the drainage pattern associated with sedimentary rocks of uniform resistance.

1.2.7. The drainage pattern that develops on alternate layers of hard and soft rock.

1.2.8. The drainage pattern that will develop on a dome. (8x1) (8)

1.3 FIGURE 1.3. represents the occluded stage of a mid-latitude cyclone.

1.3.1 Give evidence from the diagram to prove that this is the occluded stage of a mid-latitude cyclone. (2x1) (2)

1.3.2 Describe ANY TWO expected weather conditions associated with the occluded stage of the mid-latitude cyclone. (2x2) (4)

1.3.3 Line A-B indicates a cold front occlusion.

a. Account for the formation of a cold front occlusion. (2x2) (4)

b. Draw a simple, labelled cross-section from A to B, that will represent a cold front occlusion. (3x1) (3)

c. Comment on how visibility will be influenced, as the cold front occlusion passes over the area indicated by X. (2x1) (2)

Study FIGURE 1.4. is a representation of a city's climate.

1.3.3 Define a heat island. (1x1) (1)

1.4.2 Give TWO reasons why modern buildings have an effect on heat Island (2x2) (4)

1.4.3 What effect will the increased temperatures have on urban inhabitants? (1x2) (2)

1.4.4. In a paragraph of approximately EIGHT lines, explain how the green belt and rivers will reduce the effect of heat island (4x2) (8)

1.4 Study FIGURE 1.5. which illustrates the longitudinal profile of a river and cross sections of each stage.

1.4.1 State the difference between a cross profile and a long profile of a river (2x1) (2)

1.4.2 Identify the THREE stages depicted as 1, 2 and 3 in the longitudinal profile in FIGURE 1.5. (3x1) (3)

1.4.3 a. Match the cross profiles, A and B, with the course of the river in which you will find them. (2x1) (2)

b. Give reasons for your answer to QUESTION 1.5.3 .(a) (2x2) (4)

1.4.4 a.The profile in FIGURE 1.5. IS UNGRADED. Give a reason to support this statement (1x2) (2)

b. Mention ONE way in which the ungraded profile in FIGURE 1.5.4. can become graded. (1x2) (2)

1.5 Refer to FIGURE 1.6, which illustrates river capture.

1.5.1 Define the term river capture. (1x1) (1)

1.5.2 Name the high lying area separating two drainage basins. (1x1) (1)

1.6.3. Refer to FIGURE 1.6.

a. Mention ONE factor that could have resulted in river capture. (1x1) (1)

b. Explain how the factor mentioned in QUESTION 1.6.3.(a) result In the river capture. (2x2) (4)

1.6.4 Name the features C and D respectively. (2x1) (2)

1.5.3 Evaluate in a paragraph of approximately EIGHT lines, how river capture influences human activities along river C. (4x2) (8)

QUESTION 2

2.1. Refer to FIGURE 2.1. flow characteristics (laminar or turbulent flow) of river before answering the following questions.

2.1.1. The type of flow caused by obstructions on the riverbed.

2.1.2. The type of flow associated with high stream velocity.

2.1.3. The flow where there is a high rate of erosion.

2.1.4. The type of flow that occurs in the lower course of the river.

2.1.5. The type of flow that occurs in the upper course of the river.

2.1.6. The type of flow where the river channel is very smooth.

2.1.7. The type of flow where the river looks as it has much white water. (7x1) (7)

2.2. Choose a term/ concept from COLUMN B that is associated with the description in

in COLUMN A. Write only the letter (A-I) next to the question number (1.1.1.-1.1.8) for

Example 1.1.9 K

	COLUMN A	COLUMN B
2.2.1.	Angle at which the sun rays strike a slope	A. South Atlantic High
2.2.2.	Warm winds that blow up a mountain or a steep slope.	B. Aspect
2.2.3.	Temperature drop below dew point temperature and precipitation collects in this lower part of the valley.	C. Coriolis force
2.2.4.	A pressure system over the cold ocean to the west of South Africa.	D. Frost pocket
2.2.5.	In a valley, settlements will mostly develop in this zone.	E. Anabatic winds
2.2.6.	Semi-permanent anticyclone situated over the interior of Sothern Africa	F. South Indian High
2.2.7.	The relation of the hills slopes to the sun's rays.	G. Thermal belt
2.2.8.	Force that deflects the direction of moving objects as a result of the rotation.	H. Slope aspect
		I. Kalahari high

(8x1) (8)

2.3 FIGURE 2.3 shows Berg wind conditions

2.3.1 Name high pressure cell A. (1x1) (1)

2.3.2 In which season do berg winds generally occur? (1x1) (1)

2.3.3 With reference to the diagram, state TWO conditions under which berg winds originate. (2x2) (4)

2.3.4 Give ONE reason for the change in the temperature of berg winds as they blow from the interior **A** to the coast **B.** (1x2) (2)

2.3.5 Refer to the weather station at C and give ONE reason for the clear skies. (1x2) (2)

2.3.6 Why are berg winds associated with veld fires in winter? (2x2) (4)

2.4. Refer to FIGURE 2.4.A and FIGURE 2.4.B showing a satellite image and a case study oftropical cyclone

2.4.1 Which category of tropical cyclone is tropical cyclone Idai? (1x1) (1)

2.4.2. In which hemisphere has the tropical cyclone in the image occurred? (1x1) (1)

2.4.3. What is the source of energy that drives this tropical cyclone? (1x1) (1)

2.4.4. How many tropical cyclones has occurred including cyclone Idai. (1x1) (1)

2.4.5. Excluding Mozambique which other country neighbouring South Africa has been affected by Cyclone Idai. (1x1) (1)

2.4.6.State THREE conditions that could have led to the development of cyclone Idai.(3x1) (3)

2.4.7. In a paragraph of approximately EIGHT lines, explain why the tropical cyclone causes a greater negative impact in developing countries than in developed countries (4x2) (8)

2.5 Refer to FIGURE 2.5. which shows a fluvial landform(oxbow lake)

2.5.1. In which course of the river will this fluvial landform develop? (1x1) (1)

2.5.2. Identify the feature at X. (1x1) (1)

2.5.3. Explain how is the Oxbow lake is formed (2x2) (4)

2.5.4. Where is deposition and erosion occurring? (2x1) (2)

2.5.5. Refer to the oxbow lake.

In a paragraph of approximately EIGHT lines, explain how the oxbow lake become cut off from the mainstream and how water supply can be maintained in this oxbow lake. (4x2) (8)

2.6. Refer to FIGURE 2.6 which depicts a delta.

2.6.1 In which course of a river does a delta form? (1x1) (1)

2.6.2 Write a term for the point where a river enters the sea. (1x1) (1)

2.6.3 Explain why the river deposits its load as it enters the sea (2x2) (4)

2.6.4 Sate TWO conditions that lead to the formation of a delta. (2x2) (4)

2.6.5 Evaluate the economic importance of deltas for many countries throughout the world (2x2) (4)

QUESTION THREE

3.1. Give ONE word/term for each of the following descriptions. Write only the word/term next to the question number (3.1.1-3.1.7)

3.1.1. The grouping of people, building structures and communication networks that function as a unit daily.

3.1.2. A system of ranking urban areas according to size and functions.

3.1.3. The zone on the outskirts of the city where an airport can be found.

3.1.4. The smallest type of urban settlement.

3.1.5. The percentage increase of people living in urban areas.

3.1.6. Most accessible area dominated by skyscrapers.

3.1.7. The merging of many towns and cities.

3.1.8. The land-use zone where buildings are dilapidated or are in a bad state and there no renovations taking place (8x1) (8)

3.2. Choose the correct word from those given in brackets. Write only the word next to the question number (3.2.1.-.3.2.7) in the ANSWER BOOK.

3.2.1. (Situation/site) is the piece of land on which a settlement is built.

3.2.2. The process whereby people move out of cities to rural areas is called (counter-urbanisation/rural-urban migration)

3.2.3. The uncontrolled growth of an urban area is known as (urban growth/urban sprawl)

3.2.4. The (megalopolis/conurbation) is the largest type of settlement.

3.2.5. (Central place/CBD) is the name given to the settlement with dependent towns

surrounding it.

3.2.6. The (dry-point/wet-point) settlement is found in an area where water is scarce and people live close to the water supply

3.2.7. The process whereby a land-use zone changes into a new function (facadism/invasion and succession) (7x1) (7)

3.3. Refer to figure 3.3, an article on land reform and answer the questions that follow.

3.3.1. Define the concept land reform. (1x1) (1)

3.3.2. Differentiate between land restitution and land redistribution. (2x1) (2)

3.3.3. Where did the attempted land grab take place (1x1) (1)

3.3.4. What do you understand by the term land expropriation? (1x1) (1)

3.3.5. Why can this land grab not considered as land expropriation? (1x2) (2)

3.3.6. Explain why land restitution process is very slow. (2x2) (4)

3.4. Study FIGURE 3.4. on informal settlement and answer the questionsthat follow:

3.4.1. What is an informal settlement? (1x1) (1)

3.4.2 Give ONE reason why the growth of informal settlement is in the rise. (1x2) (2)

3.4.3. Name the street pattern usually associated with these types of settlements. (1x1) (1)

3.4.4. Very few employment opportunities exist in an informal settlement. However, many inhabitants of informal settlement are “self-employed”. What do these people do to earn a living (2x1) (2)

3.4.5. What building material does a resident in this area use to build the shacks? (2x1) (2)

3.4.6. In a paragraph of not more than eight lines discuss the impacts of informal settlements on governance, management of cities, and suggest possible strategies how city managers can handle problems associated with the

settlements. (4x2) (8)

3.5. Many inhabitants of rural areas, especially young people, are becoming dissatisfied with life in rural areas. This results in process known as rura depopulation.

3.5.1. Explain the term rural depopulation. (1x1) (1)

3.5.2. Why are so many young people becoming dissatisfied with life in rural areas? Give TWO push factors. (2x2) (4)

3.5.3. How will this migration impact on the: a. rural areas

b. urban areas. (2x2) (4)

3.5.4. In a paragraph of approximately EIGHT lines, discuss what authorities can do to minimise this type of migration in a sustainable way. (4x2) (8)

3.6. Refer to figure 3.6. on the CBD, and answer the questions below.

3.6.1. What does the abbreviation CBD stand for? (1x1) (1)

3.6.2. Give the term used to describe the side- view of the city. (1x1) (1)

3.6.3. Provide ONE reason for the high building density in the CBD. (1x2) (2)

3.6.4. What modes of transport bring the commuters to the CBD. (2x1) (2)

3.6.5. Many functions tend to be leaving the CBD and relocate to the new suburban shopping centres. Account for this movement. (2x2) (4)

3.6.6. Discuss suitable measures that can be introduced to breathe life back into the CBD. (2x2) (4)

TOTAL : 225