EXAMINATIONS COUNCIL OF ESWATINI

JC

EXAMINATION REPORT

FOR

GEOGRAPHY

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2021

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JC Geography

Paper 527/01

General Comments

The number of candidates who sat for the Junior Certificate Geography Paper 1 examination in 2021 was 13 231 which was an increase from 2020 when 10 942 candidates sat for this paper. This indicates an increased number of candidates of 2 289 in 2021. As stated in the examination syllabus, the examination tested candidates on the following assessment objectives; **knowledge with understanding, analysis and interpretation as well as judgement and decision making**. The examination paper has three sections which have two questions each: **Section A – Eswatini, Section B − SADC countries and Section C − countries outside Africa**, which makes six questions in all. From each of these three sections, candidates are expected to choose and answer one question.

During the marking exercise, examiners observed inconsistency in the quality of candidates' responses. The general observation was that most candidates found it challenging to respond satisfactorily to almost all the items that this examination paper contained. In lower-order questions like name, list, and state, most candidates could not score. In the higher-order questions like suggest, discuss and explain, candidates also failed to score. Moreover, some candidates in the explain items gave the point and failed to give an explanation. These are indications that some centres have not fully embraced the approach of making learners explain or suggest to the fullest expectations to meet the demands of the question. Centres are advised to assist candidates to note the marks allocated to each part question as the marks indicate the depth and level to which learners are expected to develop their points. A correct explanation and suggestion approach would be to start with the point and then follow with the explanation so as to obtain maximum marks per question. Learning this skill can assist the learners to desist from just giving simple statements when they are expected to fully suggest or explain.

Additionally, it is also encouraged that centres instil geographical terminology and expression in candidates, as such assisting candidates not to lose marks unnecessarily. Candidates still continue to write responses such as enough rainfall, good temperatures, and flat land, to name a few. Such answers or responses fail to score as there is no scale that measures enough rainfall but straight responses like high rainfall, moderate temperatures and undulating land are appropriate geographical expressions that centres should acquaint candidates with. Another notable area of improvement that centres should always remember is the issue of negative statements which again calls for an informed thoughtful consideration and wording when candidates attempt the examination paper.

Another dominant observable concern in this year's exam was the issue of rubric infringement cases. Rubric infringement cases occur when a candidate responds in a way that is not prescribed by the instructions in the examination paper. The common one this year was candidates who wrote all six questions, followed by those who did not attempt a question in either section B or C. Noticeably, almost all the rubric infringement cases scored very low marks. Mostly, the candidates appeared to have not covered the syllabus well or they had missed some sections on the syllabus.

On the positive aspect, however, some centres performed exceptionally well with some candidates almost scoring maximum marks in each question. This indicates good work by centres. Below the report presents comments per question and it is very much commended that any user of this report maximises its usage by reading it in aggregation with the question paper so as to increase its enhanced comprehension.

Comments on Specific Questions

Section A – ESWATINI

Question 1

As always this was the most popular question among candidates.

(a) (i) Name the physiographic region that has mostly acidic soils.
The correct answer was **Highveld** but a number of candidates gave lowveld or middleveld.

(ii) Mention two other soil types that are found in Eswatini.
The two other soil types found in Eswatini were; **sandy soils/sandy-loamy soils/grey sandy loamy/white sandy, vertical soils, pseudopodsolic soils, clay soil/red clay, black clay, raw mineral soils**. Candidates had to mention any two of these.

(iii) Explain two reasons why some soils in Eswatini are acidic?
This question seemed to be challenging for most candidates as it demanded them to explain why some soils are acidic. The candidates had to give a point and explain as follows;
- **Bed rocks- the be rocks of the Highveld are acidic which influence the soils to be acidic too.**
- **High rainfall- the high rains makes the soils to be acidic.**
- **Abundant organic material- the high vegetation of the Highveld when it decays makes a lot of organic material which causes the soils to be acidic.**
- **Application of fertilisers- the application of too much fertilisers may also increase the acidity of the soils.**
- **Monoculture- the growing of one and the same crop in the same field may also make the soils to acidic.**

(b) (i) Name the types of mining shown as A, B and C.
The types of mining shown by the diagrams proved to be challenging to most candidates as mostly they gave underground mining for A and the rest they left blank spaces.

A- Vertical/deep shaft

B- Open cast/open pit/strip

C- incline/adit/drift

(ii) Mention any two areas where coal deposits are found in Eswatini.
This question demanded candidates to mention two areas where coal deposits are found in Eswatini and a number of candidates gave Mpaka with a lot naming Dvokolwako and or Sidvokodvo whereas the expected correct answers were; **Maloma, Mpaka, Sulutane, Lubhuku, Hlane, Mabhekaphansi and Mhlume.**

(iii) State any two economic uses of coal.
For the economic uses of coal, candidates mostly seemed to have been confused or did not comprehend the key word **economic** uses, thus they gave simple responses such as for making fire at home which was an example of domestic uses. The correct responses were; **energy production/thermal power electricity, metal processing/iron and steel production, coke production, manufacturing/chemical production/paint production.**

(c) Suggest any three negative impacts of mining on people.
This question demanded candidates to suggest three negative impacts of mining to the people. A majority of candidates lost marks in this question. Firstly, these candidates could not comprehend that suggest is a higher-order command word which requires responses to be in the form of a point and a description or explanation. Secondly, the impact was on people whereas most candidates tended to write on the environment. The expected responses were;

- **Diseases- from exposure of coal dust in the mines which causes lung diseases**
- **Mine accidents- which kill people**
- **Resettlements- as people are moved away from their places of occupation**
- **Mine closure- and people lose jobs when mines close**
- **Water pollution- mine waste may contaminate water and people may get ill or die from drinking the water.**

Question 2

The question just like Question 1 was popular, and its performance was fair.

(a) (i) Name the main region where cattle farming is mainly practised in Eswatini.
Candidates were able to state that the **Lowveld** was the region where a cattle farming is mainly   practiced, although some opted for Highveld.

(ii) Mention any two outputs of subsistence cattle farming.
The two outputs of subsistence cattle farming were given by candidates as, **skin/leather, blood, meat, milk, hooves, horns, bones, milk/sour milk, cow dung/kraal manure**. Others lost marks for writing answers such as emasi which did not score.

(iii) Explain any two problems faced by subsistence cattle farmers in Eswatini
A majority of candidates were able to explain problems faced by subsistence farmers in Eswatini which were;
- **Overstocking- too many cattle on a small land reduces produce.**
- **Drought- destroys pastures**
- **Diseases – kills cattle**
- **Shortage of rainfall/water – which kills animals**

(b) (i) Name the cash crops grown in the places marked D, E and F.
Candidates found it difficult to name the cash crops grown in the stated areas. Most of them wrote the crop instead. The correct expected responses were;
  D – Sugar cane/ citrus fruits
  E – Pineapples/ sugar cane/maize
  F – Citrus fruits

(ii) State any two physical factors that promote the growing of one of the cash crops named above.
For the physical factors the main limitation of candidates was the failure to quantify or specify   the condition of the factors, e.g. Temperature instead of being **warm temperatures of about 20- 30 degrees Celsius**, humidity instead of writing correctly to say **high humidity of between 70- 80 %,** rainfall instead of saying **high rainfall of about 800- 1200mm per annum**, flat land instead of saying **gentle undulating land**.

(iii) Mention any two problems faced by growers of the cash crop identified above.
For the problems faced by crop growers, a few candidates were able to recognise that **drought, pest and diseases, sun-burn strong winds, frost/hail damage and shortage of arable land** were the expected responses.

(c) Explain three problems encountered in preparing virgin land for agriculture in Eswatini.
This Item was one of the most challenging one to a number of centres. The key word in this question was on preparing virgin land and the explanations had to include a point and some discussion as follows;

- **Removal of trees- which sometimes require heavy machinery**
- **The use of heavy machinery- causes soil compaction**
- **Drainage problems-which may cause water logging**
- **Soil problems- sols can be acidic/ alkaline thus may need a lot of inputs**
- **Lack of capital- thus large sums of money are needed**

Section B- SADC

Question 3

This was yet another question that was popular.

(a) (i)   **What is coastal tourism?**
The majority of candidates were unable to give the definition of coastal tourism as **visiting coastal areas for fun/leisure/pleasure**.

(ii)   **Mention any two coastal tourism activities in South Africa.**
The coastal tourism activities that are common in South Africa include: **swimming, skiing, surfing, beach games, fishing, boating/sea cruise, wildlife watching/birds, boating, sun bathing and beach games.**

(iii)   **Explain two factors that promote the growth of coastal tourism in South Africa.**
The factors that promote the growth of coastal tourism in South Africa were supposed to be marketing done by the ministry of tourism in South Africa, **encouraging clean beaches, good security/ reduce crime, interesting scenery, good airports/ transport means, water fronts, many good hotels, etc**.

(b) (i)   **Name the political regions shown in the map as, G, H and I.**
The political regions that were asked in this question were to be;
G – Kwazulu-Natal
H – Mpumalanga
I – Western Cape

(ii)   **Mention any two factors that affect the climate of South Africa.**
A number of candidates failed to mention two of the factors that affect the climate of South Africa are: **latitude, prevailing winds, altitude, ocean currents, distance from the sea and aspect.**

(iii)   **State any two uses of wheat.**
This question expected leaners to state any two uses of wheat and those who attempted it were able to correctly give them as: **making bread/flour, used as fodder/ animal feed, making baskets, breakfast cereals/weetbix, making alcohol, wheat starch**. A number of candidates wrote cornflakes which did not score.

(d) Suggest three problems faced by wheat farmers in South Africa.
This question on problems of farmers in Eswatini was well done by those candidates who attempted this question. The correct responses were;

- **Drought – which leads to low yields**
- **Infertile soils- leads to low yields**
- **Pests and diseases- destroys crops**
- **Fluctuation of world market prices- which reduces profits**
- **Lack of deep fertile soils- which requires more fertilisers**
- **Unreliable rains – which destroy yields**
- **Increased farming costs- which reduces profits**

Question 4

This was the most unpopular question which was attempted by candidates that wrote all the questions.

(a) (i)   Name the physiographic region that is found on the Eastern part of Lesotho.
The **Highland** was the correct answer for the question which sought to find the region that is found in the eastern part of Lesotho.

(ii)   State any two crops grown in Lesotho.
Two crops grown in Lesotho that were expected in this question **were maize, wheat, asparagus and sorghum.**

(iii)   Explain two factors that limit the growth of crops in the Eastern part of Lesotho.
The factors that limit the growth of crops in the eastern part of Lesotho were supposed to be:
- **Steep slopes- which makes it difficult for farmers to grow crops**
- **Low temperatures- which affect crop growth**
- **Thin soils- because of rugged relief**
- **Poor farming methods- which leads to soil erosion**

(b) (i)   Name the features marked as I, J and K in Fig. 4.
This question was on Namibia and expected candidates to name some features which were:
I – Desert/Kalahari
J – Desert/Namib
K – River/Orange

(ii)   State any two factors that influence the drainage pattern in Namibia.
The two factors that influence the drainage pattern in Namibia had to be: **topography, nature of the rocks or slope of land**.

(iii)   Mention any two sources of water in Namibia.
On the sources of water in Namibia the expected correct answers were; boreholes, perennial   water, ground water/aquifers desalinated water and recycled water.

(c) Suggest three factors that affect cattle distribution in Botswana.
This question was on factors that affect cattle distribution in Botswana and the responses expected;
- **Climate – more cattle are found where climate is conducive**
- **Vegetation – cattle are found where there is availability of grass**
- **Water supply – water supply is guaranteed near water sources**
- **Diseases – place with cattle diseases have few cattle**
- **Wild animals – areas where there are many wild animals which eat livestock have few animals**

Section C- Countries outside Africa

Question 5 – Japan and the Netherlands

This was the most popular question amongst candidates in this section. Except for a few part questions, mostly candidates who attempted this question performed exceptionally well.

(a) (i)   Name the crop that is grown in the steep slopes of Japan.
Most candidates did not know that the crop grown on the steep slopes of Japan was **tea.** They stated that it was rice and this response did not score.

(ii)   Mention any two other crops grown in Japan.
For the two other crops grown in Japan most candidates correctly stated **rice, wheat, barley, vegetables, fruits, tobacco or sugar cane.**

(iii)   Explain the importance of the use of machinery in Japan's agriculture.
Most candidates could not explain correctly the importance of the use of machines in Japan's agriculture instead they simply described the use of machinery like cultivations, irrigation to count but a few of their incorrect responses. The expected responses were;
- **Machinery is faster which saves a lot of time for farmers**
- **It increases yields as it does work easier than man**
- **It increases land under cultivation as it is able to work even in steep slopes**
- **Machinery reduces grain wastage as it collects much better than human labour**

(b) (i)   Name the processes shown as M, N and O.
This question required candidates to name processes shown and it was well done by a majority of candidates as:
M – Grazing
N – Milking
O – Transportation

(ii)   State two advantages the dairy cattle in the Netherlands have on the environment.
The question on advantages of cattle on the environment of the Netherlands was confused by some candidates who talked about the cattle instead of stating that **the cattle maintain grass, encourage more grass to grow, fertilise the soil, encourage vegetation growth, and trample organic matter into the soil**

(iv)   Mention two advantages the dairy cows have for milk production.
The two advantages of dairy cows in Brazil were well attempted by most candidates. The correct responses were; **they have a long life span, they have production rate/produce high volume of milk per day, they adapt to different climates.**

(c) Suggest three solutions to the problems facing the fishing industry of Japan.
This question was poorly done by most candidates as they went on to discuss problems instead of solutions as per demands of the question. The correct expected responses were;
- **Fishing licenses – to control fishing**
- **Restricted fishing- to allow fish to multiply**
- **Fishing boundaries – to address problem of fishing disputes**
- **Treat waste from industries- to avoid sea pollution**
- **Restock overfished areas- to increase fish production**
- **Increase net size- to only catch big fish**

Question 6- India and Brazil

In this section, this was the least chosen question.

(a) (i)   Name the largest tea growing region of India.
The largest tea growing region in India was so difficult for candidates, very few scored it correctly as **Assam**.

(ii)   State any two uses of tea by-products.
The tea products were stated correctly by most candidates as; bio-oil/cosmetics, ice-tea drinks, vitamins, animal feed, floor mats, etc.

(iii) Explain any two economic factors that promote the growth of tea in India.
The two economic factors that promote tea growing in India proved to be a challenge for most candidates as they could not explain:
- **Availability of markets- to buy the tea products**
- **Availability of capital- to buy inputs**
- **Low labour costs= increases profits**
- **Tea associations- assist in protecting small tea farmers**

(b) (i)   Name the processes that take place in each of the stages shown in Fig. 6.
The majority of candidates failed to correctly give the processes of tea production which were:
- **Stage 1= spinning/separation/evaporation**
- **Stage 2= coagulation**
- **Stage 3=sheeting**

(ii)   State any two rubber products.
The question was well answered by most candidates. The expected responses were: **tyres, erasers, condoms, elastic rubbers, etc.**

(iii)   Mention two advantages of artificial rubber over natural rubber.
The advantages of artificial rubber over natural rubber were also well identified by a majority of candidates as: **good resistance to heat, faster to produce, flexible, can be used for many uses, resistant ton grease/ oils/ chemicals.**

(c) Explain three problems experienced by the Brazilians who exploit the tropical rain forest.
The problems faced by Brazilians who exploit the tropical rain forest were well discussed by most candidates:
- **High temperatures- which makes it impossible to exploit the forest trees**
- **High humidity- which makes navigating the forest difficult**
- **The presence of dangerous animals which can kill people**
- **Diseases- like malaria fever can kill people**
- **Ever wet grounds- makes accessing or moving into forests difficult/slippery**
- **Dense forests that are difficult to penetrate.**

Paper 527/02

The total number of candidates who sat for 2021 Geography Paper 2 was 13231 which showed an increase of 2 289 compared to 2020 when there were 10 942 candidates who sat for the same paper.

The paper tested candidates on the following skills; knowledge with understanding, analysis and interpretation, as well as judgment and decision making. The paper had four questions and candidates were required to attempt all questions.

Question 1 (Map Reading and Interpretation) and **Question 4** (Population and Settlements) were the most challenging questions in the paper with some candidates scoring a zero in both questions.

All the four questions were attempted by a majority of candidates. However, in some centres candidates would leave a whole question not attempted.

It is strongly recommended that Map Reading and Interpretation be taught earlier so that candidates get more time for practice during the 3 year period of the J.C. syllabus. It is also recommended that teachers should integrate some of the topics with map reading such as settlements, rivers to name a few, because questions requiring candidates to display knowledge of such topics are usually examined in map reading.

Furthermore, candidates should be given more resource based questions so that they are familiar with the skills of analyzing and interpretation of resources as well as taking decisions and judgment based on what they learned in class.

Comments on Specific Questions

Question 1 – Map Reading and Interpretation

This was a challenging question to most candidates hence the general performance was very low with more than half the candidates who sat for the paper. The skill of accuracy should be emphasized among candidates as some lost marks especially in distance and bearings because they were a bit inaccurate yet they knew the skills of measuring distance and bearings.

(a) Name any one method used on a map to show altitude.
Most candidates gave contour interval as the answer which was wrong instead of **contour lines or spot heights, trigonometrical stations, layer colouring and hachuring.**

(b) What is the name of the feature found in 437720?
A few candidates were able to identify that the feature was a **reservoir.** A majority of them gave pipeline as the answer which was incorrect.

(c) List two river features found at grid square 4486.
Most candidates were able to list only one feature, a **meander** and failed to list the others which were **braiding and confluence.**

(d) Identify the main drainage pattern found at grid square 5072.
A majority of the candidates gave trellis as the answer. This implied that the candidates failed to study the question closely because it required the **main** drainage pattern which was the **dendritic pattern.**

(e) What is the direction of flow of the Nyagui river found in the South Eastern part of the map.
A large number of candidates gave South West as the answer which was the direction where the river flows from. Candidates should be made aware that such a question requires them to state the direction where the river flows to. In this case the correct answer was **North East**.

(f) Measure the bearing of the trigonometrical station on Masimbe mountain (4773) from the peak of Rupara mountain (4370).

A reasonable number of candidates were able to measure the correct bearing which was **50°**. However, others could not score because they failed to give their answer in three digits as a requirement in bearings. Others also could not score because they were a bit inaccurate yet they displayed knowledge of the skill of measuring bearings.

(g) (i) Measure the distance in metres along the wide tarred road from the bridge (4890) to the junction at grid square (4785).

This was a fairly well attempted question as most candidates were able to get **5100 metres** as the correct answer. However, some could not score because they were a bit inaccurate while others omitted the units or gave the answer as 5.1km which was not the requirement of the question.

(ii) The height of the road at grid square (4890) is 900m and the height of the road at junction (4785) is 940 m. Calculate the gradient of the slope along the road.

This question proved to be a challenge to most candidates because they had given a wrong answer for (g) (i) wrongly yet they were supposed to use that answer as the Horizontal Equivalent. Other candidates knew the formula for gradient and got the correct fraction but did not know that they had to divide both sides of the fraction by the numerator in order to get the correct gradient. The correct answer was

$$\text{Gradient} = \frac{VI}{HE}$$

$$= \frac{940m - 900m}{5100m}$$

$$= \frac{40m}{5100m}$$

$$= \frac{1}{127.5} \quad \text{OR} \quad 1:127.5 \quad \text{OR} \quad 1 \text{ in } 127.5$$

(h) Identify two recreational facilities shown in the town of Shamva.

A majority of candidates failed to note that the question required recreational facilities not just facilities in general. The correct answers were **rifle range and sports field**

(i) Name the settlement pattern shown in grid square 5170?

A majority of candidates could not score as they wrote nuclear instead of **nucleated or clustered.** Candidates should be made aware that there is a difference between nuclear and nucleated.

(j) Using map evidence only, state two factors that favour the location of Shamva mine found to the south of Shamva town.

This was a fairly well done question as most candidates were able to state the factors such as **wide tarred road, railway line, water supply or rivers and gently sloping land.**

Question 2 – Research Skills

This question was also a challenge to many candidates as they scored below 2 marks. Some candidates did not attempt the whole question at all.

(a) Identify the last step when one carries out a research.

Very few candidates got this one correct as most of them wrote data presentation which was incorrect. The expected answer was **conclusion or recommendations.**

(b) List two aims of carrying out a research.

Generally, the question was well done as most candidates were able to give correct responses such as: **to get new information, to solve problems, to predict results, etc.**

(c) What type of graph would the students use to show their results?

Students at a secondary school were making counts on different modes of transport; bicycles, buses, motor-vehicles and trains. Candidates were required to name the type of graph the students would use to show their results. A majority of candidates wrote tally graph which was wrong yet the correct answer was **bar graph.**

(d) State one disadvantage of conducting traffic counts.

The question required candidates to state one disadvantage of conducting traffic counts. Few candidates were able to give the correct answers which were; **students can be exposed to danger/accidents; students can make errors/mistakes.**

Question 3 – Physical Geography

This was a fairly well done question compared to previous years. The performance was impressive in some centres with most candidates getting way above half the marks allocated for the question.

(a) (i) Name the type of volcanic cone shown in Fig. 1.

Candidates did fairly well as most were able to name the volcanic cone as a **composite cone.** Few candidates wrote conelets which was incorrect.

(ii) Describe four features of the volcanic cone shown in Fig. 1.

This was another generally well done question as most candidates were able to bring out features of the volcanic cone such as **crater, pipe, vent, lava layer, ash layer, conelets or parasitic cones or secondary cones, dykes.** However in some centres candidates left the question unanswered.

(b) (i) State the month with the highest amount of rainfall.

Generally, this was well done as a majority of candidates were able to state the month as **March.** However, some candidates seemed not to know that the letters in the graph represented months thus they just wrote the letter M which was incorrect.

(ii) State the month with the lowest amount of rainfall.

The question required candidates to state the month with the lowest amount of rainfall. It was another generally well done question as candidates were able to state the month as **August,** although others just wrote the letter A like in (b) (i) above.

(iii) Calculate the annual temperature range for this region.

This was a challenging question as candidates displayed that they lacked knowledge on how range is calculated. Those who knew the formula lacked the skill of reading the graph accurately. They were expected to **subtract 23^0C from 32^0C to give them 9^0C.**

(iv) Describe the rainfall pattern shown in Fig. 2.

The question was generally well answered by a majority of candidates as they were able to give correct answers such as: **rainfall throughout the year, rainfall increases from January to March, rainfall decreases from April to August, etc.**

Question 4 – Population and Settlements

This was a very challenging question to a majority of candidates with a majority of candidates in most centres getting a zero. In some centres the whole question was left unanswered. This was contrary to the way the candidates performed in the section previously.

(a) (i)   What is the name of the model shown in Fig. 3?
This was a challenging question as a majority of candidates failed to get this correct as they wrote earth's structure instead of Concentric/Burgess model.

(ii)   Identify the zones marked as B and C.
Candidates were required to identify the zones marked B and C. this was a challenging question as most candidates confused the zones with the layers of the earth's structure. Those who had an idea of the zones wrote the wrong zones. The expected answers were;
Zone B – industry/light manufacturing/zone of transition
Zone C – residential/low income housing/high density housing

(iii)   Explain the shape of the model shown in Fig. 3.
Most candidates failed to describe the shape of the model as they left the question unanswered. However in some centres they were able to describe the shape that **it forms rings, it is circular and concentric.**

(b) (i)   Name the type of population pyramid shown in Fig. 4.
The question required candidates to name the type of population pyramid shown in Fig. 4. Most candidates gave the answer as MEDC pyramid which was incorrect instead of a **regressive pyramid or bell-type pyramid.**

(ii)   How many females are aged 0-4 years?

Most candidates wrote 225 females which showed that they failed to study the pyramid closely. Below the pyramid there is the wording "population in thousands". Therefore the correct answer was **225 000 females.**

(iii)   Describe the shape of the population pyramid shown in Fig. 4.
A reasonable number of candidates were able to describe the shape of the pyramid as **narrow base, broad middle, slowly narrowing top/blunt top.** However, some candidates would say that the population is small at the base, high in the middle, and smaller at the top. All the above did not score because it described the population not the shape of the pyramid.

(v)   How would the shape of the pyramid change if HIV/AIDS were to lead to an increase in deaths?
Most candidates only described how the population will change instead of describing how the shape of the pyramid will change. Candidates were expected to give responses such as the **pyramid will be smaller, pyramid bard will decrease, pyramid will be narrow in the middle, etc.**