



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

GEOGRAPHY

6890/01

PAPER 1: Geographical Themes

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1 hour 45 minutes

Confidential

MARK SCHEME

{6890/01}

MARKS: 75

This document consists of **13** printed pages.

1 a) Study Fig.1, which shows information about a hot desert in Africa. Fig 1 A shows the location and Fig. 1 B shows its climatic graph.

(i) Name the hot desert shown in Fig.1 A.

- Sahara 1x1 = [1]

(ii) Describe two features of the climate of the hot desert shown in fig. 1 (b)

- Low rainfall.
- High daily temperatures.
- Low night temperatures.
- Extreme temperatures throughout the night. 2 x1 = [2]

(iii) Suggest three reasons why this region receives low annual rainfall

- Near cold ocean currents.
- Influence by dry offshore winds.
- High pressure
- Stable descending air 3x1 = [3]

(iv) Explain **two** effects of the climate on the natural vegetation of this region.

- Scattered trees – because of low rainfall
- Short grass – because of low rainfall
- Trees have long roots – searching for underground water 2x2= [4]

(b) The soils of the hot desert make it difficult for plants to survive.

(i) Describe three soil conditions which make it difficult for plants to survive.

- Hot soils.
- Saline soils / salty.
- Sandy.
- Alkaline . 3x1= [3]

(ii) Suggest five reasons why semi-arid regions are changing into desert-like place.

- Reduced rainfall
- Deforestation / cultivation
- Global warming / increasing temperatures
- Reduced ground water levels
- Migration sand dunes
- Pastoral farming

5x1= [5]

(c) Some climatic regions pose threats to the people and the environment.

For an example of a tropical rainforest region you have studied explain three reasons why people continue to live there.

Level 1- simple statements
 Close to their relatives/ ancestors
 Poverty
 Economic benefit e.g. mining, lumbering etc.
 Farming activities
 Hunting / gathering

Max 1-2

Level II – Any developed statements
 Close to their relatives –land belongs to their forefathers so it's hard /difficult to leave the area
 Poverty – unable to move from area due to lack of resources
 Economic benefit- creates employment opportunities which improves standard of living
 Farming activities- people get employment from plantations
 Hunting and gathering- the rainforest is rich in wildlife and wild fruits which acts as a source of food for the people
 Max 3-5

Level III-(Mark any relevant Climatic region as an example)
 marks

6 – 7

2. (a) **Study Photograph A (Insert), which shows a type of weathering in high mountains in a temperate region.**

(i) **Name the type of weathering shown in Photograph A.**

- Freeze-thaw / frost action 1x1 = [1]

(ii) **Identify the features labelled X and Y on Photograph A.**

- X - Cracks
- Y - Ice 2x1 = [2]

(iii) **Describe the process of weathering taking place in Photograph A.**

- Water gets into a crack
- Water freezes and expand its volume
- Repeated freeze-thaw action
- Cracks are enlarged by frozen water
- Small pieces fall from rock 3x1 = [3]

(iv) **Explain two physical factors that affect the rate and type of weathering shown in Photograph A.**

- Rainfall – collects in crack
- Colour
- Mineral composition
- Vegetation
- Gradient of slope
- Fall in temperature –water freezes 2x2 = [4]

(b) **Study Photograph B, which shows a type of weathering.**

(i) **Describe three main features shown in Photograph B.**

- Tree growing in cracks
- Rocks with cracks
- Multi-coloured rocks 3x1= [3]

(ii) **Explain the process of weathering that is shown in Photograph B.**

- Cracks in rock
- Roots grow into cracks
- Roots enlarge
- Widen cracks
- Crack becomes line of weakness
- Rock breaks apart 5*1 mark or development [5]

(c) Soil erosion is one of the factors that lead to a decrease in farming land.

For a country that you have studied, explain three strategies of combating soil erosion.

- Level 1 – simple statements
- Grow vegetation in affected area/ re-planting of trees
- Fill affected area
- Terracing
- Contour ploughing
- Avoid overstocking/ overgrazing [1–2 Marks]

Level II – More developed statements [3-5 Marks]

Level III – More developed statements with example and place specific [6-7 Marks]

3. Study Fig.3, which shows a simplified industrial system

(i) Identify the type of industry shown in Fig.2.

- Secondary/ Manufacturing/ Processing industry 1x1= [1]

(ii) Name one example of a primary and a tertiary industry.

- Primary Industry- forestry, mining, fishing, etc
- Tertiary Industry- transport, banking, tourism etc

2x1 = [2]

(iii) Complete Fig. 2 by suggesting any other input – A; process – B and output C.

- **Input – A;** Labour / Raw material /
- **Process – B;** Processing
- **Process – C;** Waste products

(iv) Explain two reasons why some industries are located near the raw material while some are located near the market.

- Raw material
- Reduce transport costs – of heavy raw material
- Pollution- which affects people market
- Bulky and heavy
- Perishable goods need to be close to market to avoid spoilage
- Fragile to avoid breakages during transportation.

[4]

(b) Study Photograph C (Insert), which shows a motor vehicle assembly plant owned by Nissan a Transnational company(TNC) in Japan.

(i) Describe three features of the motor vehicle assembly plant shown in Photograph C.

- Large car assembly line
- High use of technology
- High production of cars

(ii) Suggest five positive effects of transnational companies (TNCs) to people and the economy of countries where they are found.

- Boosts exports and economic growth
- Improved production in the host country
- Bring new ideas and new techniques which allows the host country to improve productivity and catch up with the economic development.
- Create jobs and offer higher income to employees
- The company helps to develop transport links around the company area

(c) Industrial estates often have negative impacts to the environment.

For an area you have studied, explain three negative impacts of industrial estates to the environment.

- Level 1 – simple statements
- Pollution
- Environmental degradation
- Loss of scenic beauty
- Diseases
- Family breakup
- Prostitution

[1-2 Marks]

Level II – Developed statements

[3-5 Marks]

Level III - Specific examples

[6-7 Marks]

4. Study Fig. 3, which shows different resources of energy used in a country.

(i) Which one of the energy resources is mainly used in this country?

- Petroleum 1x1 [1]

(ii) Using Fig. 3, identify two non-renewable resources.

- Coal
- Natural gas
- Petroleum 2x1 = [2]

(iii) Describe three problems caused by the use of animal dung and wood to the people and the environment.

- It's a source of air pollution
- Destruction of vegetation
- Global warming
- Lung infection 3x1=[3]

(iv) Explain reasons why many countries are planning to increase the use of renewable energy resources.

- Environmentally friendly / less pollution
- Little / no waste
- Cleaner
- Cheaper to run / maintain
- Readily available [4]

(b) Study Fig. 4, which shows the processes of power generation in a Nuclear power plant.

(i) Describe the processes involved in generating power using nuclear energy.

- Splitting atoms of Uranium and Plutonium in a reactor
- Heat produced in the reactor converts water into steam
- Steam turns turbines which produces electricity 3x1= [3]

(ii) Suggest five negative impacts of generating power using nuclear energy to the people and the environment.

- Disposes poisonous waste
- Expensive to construct
- Expensive to dismantle once there are no longer in use/ decommissioned
- Threat of leaked radio- activity
- Security concerns/ material for nuclear can build nuclear weapons 5x1=[5]

(c) A dam constructed for generating hydro – electricity power benefits the local people.

For a country you have studied, explain other benefits of a dam constructed for generation of hydro- power.

Level I – simple statements [1-2 marks]

- Control floods
- Fishing
- Tourist attraction
- Water transport
- Irrigation
- Water supply

Level II- More developed statements [3-5 Marks]

- Control floods - control floods for people living down stream
- Fishing- Fishing is done in dams
- Tourist attraction - provides facilities for tourists.
- Water transport - boats may be used to improve transportation
- Irrigation - used for agriculture
- Water supply - dams provide a regular water supply for rural and urban areas.

Level – III – Developed statements with examples [6-7 marks]

5. (a) Study Fig. 5 which shows the land use in a city found in an LEDC.

(i) Name the zone marked as Z in Fig. 5

- Central business district 1x1 = [1]

(ii) Describe two features of the buildings found in zone Z

- Tall buildings
- Close together
- Made of bricks / glass
- Different heights 2x1 = [2]

(iii) Using information from Fig. 5 compare the land use of the industrial and residential zones

- In the zone there are public buildings than in the residential zone.
- Convenience shops almost equal
- Residents are more than industrial sites 3x1= [3]

(iv) Suggest four problems which may be experienced in zone Z.

- traffic congestion
- pollution
- high cost of land
- noise pollution 4x1= [4]

(b) Study Photograph D, which shows an out of town shopping centre in an MEDC.

(i) Describe the location of the shopping centre.

- Near a residential area
- Route junction
- Near roundabout/ traffic circle
- Near car park
- Near the greenfield 3x1= [3]

(ii) Explain five reasons why shopping centres are built out of towns away from the city centres.

- Reduced traffic congestion
- Cheaper land
- Convenience of buyers
- Free flow of traffic
- Land is expensive in the city centre - because of high rates and rent
- Eco friendly environment

5x1= [5]

(c) Many cities and towns have grown rapidly in recent years.

For a named town or city you have studied, explain the impact of the growth of the town on the environment.

Level I - simple statements [1-2 Marks]

Pollution max =2 / air pollution, water pollution, visual

Deforestation

Soil erosion

Level II – More developed statements [3-5 marks]

Pollution of rivers – by leaking sewages from residential areas and industrial waste.

Air pollution - from car exhaust and factories leading to greenhouse gases leading to global warming.

Visual pollution - by squatter settlements and many moving vehicles.

Deforestation - which leads to loss of animal habitats, loss of flora and fauna, ecosystem disturbed

Level III - any relevant example of any city or town. [6- 7 marks]

6. Study Table 1, which shows the age structure of three countries.

(i) Using Table 1, which country is an LEDC?

Country A

1x1 = [1]

(ii) Calculate the total percentage by which the dependent is supported in Country

$$49\% + 3\% = 52\%$$

1 mark for working

1 mark for correct answer

2x1 = [2]

(iii) Suggest three ways by which the dependent population is supported in country B.

- Free medical care.
- Homes for old age.
- Schools for children constructed.
- Pension/grants

3x1 = [3]

(iv) Describe four causes of the population structure of country B.

- Low birth rates- fully accepted birth control measures.
- High life expectancy – improved health facilities
- Low infant mortality rate

2x2 = [4]

(b) Study Fig.6, which shows population distribution in Africa.

(i) Using Fig. 6 describe the distribution of high population in Africa.

- Areas that are highly or densely populated include great lakes regions like lake Victoria,
- The Eastern, Western and North Africa are densely populated.
- Countries like Madagascar and South Africa are highly populated.
-

3x1 = [3]

(ii) Suggest five physical factors which have influenced population distribution in Africa

- Fertile soils – Areas with fertile soils, such as Lake Victoria have attracted many people.
-
- Vegetation / dense forests are sparsely populated, as they are habitats for wild animals which might be a danger to human habitation, livestock and crops.
- Climate – adequate rainfall and moderate temperatures attract human habitation.
-
- Water availability is essential for human survival and development. Areas with sufficient water tend to have denser population.
-
- Location of minerals and energy resources – areas with coal may have higher population e.g. South Africa.
-
- Topography / slopes – gentle undulating land attracts higher population. Sloppy areas repel population settlements. Mountainous areas with steep slopes tend to have lower or less people.

5x1= [5]

(c) Life expectancy is higher in MEDCs than in LEDCs.

For a country you have studied explain three reasons why life expectancy may increase

Level I – sample statements

- Improved / better diet / food
- Better medical care / hospitals
- Better housing

Level II – more developed statements

- Improved food because of the advanced farming methods
- Better medical care and mortality is low
- Better housing – no roof leakage.

Level III – any relevant example of any city or town.

[6-7 marks]

