8233
Paper 2

GENERAL COMMENTS

- Candidates only read sections of the questions, instead of the whole question.
- Candidates did not know how to respond to command words, e.g. explain, evaluate, assess.
- When questions required candidates to give **examples**, they failed to do so and, therefore, failed to score marks.
- Candidates did not elaborate on statements and did not develop their answers.
- In AOC questions many candidates gave general facts without evaluation and examples.

1 (a) (i) Well answered. Many candidates could score 3 marks.

Expected answers:
Laminar
- Smooth flow of water in a series of sheets (1)
- Rarely disturbing the sediments on the bed and banks of the river(1) [2]

Helicoidal flow
- The corkscrewing/spiral flow of water (1) from one side of the meandering channel to the other side (1) [2]

(ii) Well answered. Many candidates were able to obtain 3 marks.

Expected answers:
- River loses energy (reduced velocity) to carry its load
- A decrease in the gradient of the river
- Decrease in discharge/reduced volume of water
- Sudden increase in sediment input
- Increased friction with the bed and banks of the channel
- When/where the river meets a body of water with a lower velocity than the river (e.g. Lake/sea)

3 relevant points for 3 marks [3]

(b)(i-ii) Poorly answered. Most candidates had problems answering the questions. It appears as if the candidates do not have the knowledge to explain the formation of floodplain and alluvial fans in the form of a process that takes place.

Expected answers:

(i) Floodplains

- The river widens its valley by lateral erosion/across movement of water in channel
- During high discharge, the river has high energy used to carry large amounts of material in suspension
- When river overflows its banks it will spread out across the surrounding flat land
- Increased friction reduce velocity and silt will be deposited
- Larger material will be deposited on the flood plain near the channel (forming a levee)
- Repeated deposition builds up a floodplain [4]

(ii) Alluvial fans:

- Load gets rounder and smaller downstream
- Water flows from a narrower valley to a reduced gradient into a slower flowing wider channel
- The load is deposited in a flat cone-shaped structure
- Coarser sediments are found at the apex (steeper angle) (15º) and finer sediments are found at the base of the fan lower/gentler angle (1º)
- Loss of height, energy and velocity caused deposition [4]

(c) Poorly answered. Candidates lack detailed knowledge and understanding of a specific river flood. Answers lack balance and evaluation of causes and impacts.

Expected answers:

Zambezi flood / or other relevant example

- Causes: high precipitation/heavy rains in neighbouring Zambia and Angola
- Rising water levels in the Zambezi River

Positive impacts on people

- Regular deposition of fertile soil which stimulates agricultural activities
- Vegetation forms natural fertilisers when it decays during drier seasons and is carried along and onto floodplains

Negative impacts on people

- Destruction of structures and communications
- Danger to life and property / homeless
- Farmland and crops may be inundated by flood waters and lost
- Landslides may occur and destroy settlements
- Human activities are interrupted e.g. jobs, education
- Drainage of water will be difficult and time consuming
- Pollution of water sources leaving people without clean water
- Services like electricity supply was unavailable
- Tourism and recreation are hindered during flood
- Economic impacts/recovering involves large sums of money

(1 – 4) marks: General facts without evaluation and examples.

(5 – 7) marks: Information lacking balance and evaluation is limited in detail and lacks relevant examples

(8 – 10) marks: Detailed knowledge and understanding of a specific river flood (causes and impacts evaluation)

An answer where no reference is made to a case study / example of a recent flood event, candidates can only score 2 marks max – given that 1 marks = a cause and 1 mark = an evaluated impact. [10]

[25]

2 (a) (i) Fairly answered. Many candidates could score 2/4.

Expected answers:

- Soil creep – slowest downhill movement of dry, loose soil material [2]
- Small scale soil movement on a low gradient slope (5º)
- Mudflow – rapid movement of a thick flow of liquefied debris
- Larger scale movement on steeper slopes [2]

(ii) Poorly answered. Candidates defined mass movement and weathering, but could not explain how the processes are linked.

Expected answers:

- Physical weathering cause cracks and joints to open up in rocks because of expansion and contraction (increased and decreased heat)
- Detached and disintegrated rock particles are now able to become part of mass movement
- e.g. slides and falls
- Chemical weathering decompose rock material enabling movement (flows)
- Biological weathering chemically change and physically break rocks through plants and animal movement [3]

(b) Poorly answered. Candidates described the mass movement processes, but not how they modified the slope.

Expected answers:

- Slope processes may vary in terms of frequency, scale and size
- Types of process are classified in terms of speed and water content, material type and type of movement (flows, slides, slumps)
- Soil creep: slight modification over a long time (slow process ±1cm/year) on very gentle slopes
- Development of terracettes
- Piling up of soil particles at the base against an obstruction.
- Solifluction: slightly faster process and small scale on steeper slopes
- Water saturated soil slide down under gravity
- Create lobes and sheets with debris collecting at base
- Hollow and valleys are filled up
- Earth flows on 5º - 15º slope angles saturated soil moves down in short flow tracks
- At base lobes develop over time
- Mudflows: more rapid on steeper slopes rainfall add volume to soil causing large flows of soil
- Slopes are steepened
- Scars are visible on upper levels
- At the base debris is deposited which is unstable
- Slides: occur when an entire mass of material moves along a slip plane
- Rocks are weakened, and slopes are steepened
- Massive steps or terraces are formed
- Curved scars are visible on upper slope part
- Base of cliffs are undercut and weakened by further erosion
- Slope retreatment occur
- Falls: occur on steep slopes with base rock faces and exposed joints
- Detached rocks fall under influence of gravity
- Slope retreat forming concave/straight slope faces
- Debris build up in a concave slope [6]

(c) Poorly answered. Candidates gave general facts without evaluation and examples. Unbalanced positive and negative impacts answers were provided.

Expected answers:

Factors involving removal of natural vegetation to a large extend making the soil prone to movement.

Housing

- Add weight to slopes weakening the internal strength and over time slopes will give way
- Rio de Janeiro favelas (Brazil)

Transport infrastructure

- Building roads on slopes
- Heavy vehicles cause continuous vibrations which loosens soil/rock layers

Mining

- Cause excavation or undercutting at base of slops weakening rock structures and slopes may collapse
- Blasting reveals seams thus opening up a slope to further weakness/processes

Positive impacts

- Afforestation is planting of trees on a large scale to stabilise slopes to reduce erosion and mass movement
- Slope reinforcement can be used to protect slopes (natural/man-made) from erosion and mass movement
- This can be done by netting, pinning, retaining walls, drainage and cutting and filling methods along public roads.
- Terracing involves farmers creating flat surfaces use soil more efficiently reducing erosion and large scale mass movement

(1 – 4) Basic answers with limited evaluation

(5 – 7) Lacks balance between positive and negative impacts and detailed evaluation is limited

(8 – 10) Both positive and negative impacts assessed and relevant examples given

An answer where no reference is made to an example, candidates can only score 2 marks max.
If candidates only discuss negative impacts they can only score 6 marks max. [10]

[25]

3 (a) (i) Well answered. Candidates were able to define small-scale industry and multi-national industry.

Expected answers:

A – Small-scale (cottage) industry

- Home-based/family labour (1) small-scale production unit (1)
- Produce handicrafts simple items for household goods. Likely to produce clothes, precious items e.g. jewelry, shopping bags, ornaments, statues, gems/edible items
- Handicrafts may be sold for tourist market/other products (with example) sold for local use in households
- Made by using simple tools/technology and personal skills
- May use locally available raw materials. [2]

B – Multinational industry

- Different elements of the production process are located in different countries
- An appropriate reference to typical locations for one of: R and D, HO, branch/assembly or sales and marketing
- They can move parts of their company to avoid trade tariffs and tax barriers/ to locate in low production – cost countries where wages are lower/in low-regulation countries where there are fewer laws
- Very large – scale production/use economies of scale/worldwide markets/very large number employed [2]

(ii) Fairly well answered. Candidates were able to score 2/3.

Expected answers:

- Do not have a lot of money to spend on day to day operations
- Limited/little money to spend on machinery/technology only have money for simple/basic tools.
- Limited educational development/schooling; use therefore skills practiced for generations.
- Do not have to borrow money from banks/development funds, etc
- Cannot afford to pay for additional workers therefore use basically only family members.
- To rent or buy premises is a huge expense which they cannot actually afford seeing their small profit margin.
- Traditional handicrafts are normally made from readily available raw materials which they can get locally from recycling outlets. [3]

(b) Fairly well answered, although many candidates were able to score higher marks by referring to a named example and explaining how the factors apply to the named examples. Some candidates described the general factors instead of explaining.

Expected answers:

- Example: Volkswagen, South Africa

Market:

- local and international market

Labour:

- large labour pool readily available
- skills – engineers, vehicle designers
- semi-skilled working in assembly line

Transport

- close to harbour for export and import of component parts
- railway/roads – component parts/vehicles

Electricity

- ESCOM/nuclear power/HEP

Land

- leveled/gentle – for assembly plant
- large storage of vehicles
- large cheaper land – future expansion

Capital

- investment/shareholders/banks

Raw materials

- component parts made elsewhere

Water

- dams/pipelines [8]

(c) Fairly well answered. Candidates described how the growth of manufacturing industries influenced countries in general. Answers lacked accurate and relevant examples to Namibia. Answers lacked balance between both social and economic influences.

Expected answers:

Social

- Creates job opportunities
- Higher income leads to higher standard of living
- Improve Quality of Life
- Improve pool of trained labour/training/education
- Transport systems develop/infra-structure
- People become dependent on industries – if withdraw – loose job opportunities
- Manufacturing leads to rural urban migration

Economical

- Income for local people/higher GDP/greater local wealth
- Locals have more money to spend therefore increased demand for other services
- Increased spending power of local people
- Multiplier effects develops e.g. development of other industries
- Growth in tertiary sector/services
- Increased income from taxes for government
- Export/foreign currency/GNP grows
- Improvement and increasing investment in the country
- Natural resources will be manufactured and products exported instead of exporting raw materials at a lower value
- Local products will become less expensive

(1 – 4) A basic answer where evaluation is limited or not present.

(5 – 7) An answer which lacks balance and evaluation is likely to be limited in detail an may lack relevant examples.

(8 – 10) A detailed well balanced answer that look at both social and economic factors. Accurate and relevant examples are expected.

An answer where no reference is made to Namibia candidates can only score 2 marks max given 1 mark = social and 1 mark = economic.

If candidate only discuss social/economic influence candidates can only score 6 marks max. [10]

[25]

4 (a) (i) Well answered. Candidates were able to score 4/4.

Expected answers:

Arable	**Pastoral**
Inputs	
Seed	Animals
Fertilisers / Pesticides	Vaccines
Smaller size of land	Larger size of land
	More frequent labour input/human attention needed
Outputs	
Crops	Animals
	Manure
Seeds for next season	Animal products

[4]

Credit should be given if/when candidates give an area/example as long as answers are aligned with those in the mark scheme but implied in such a context.

(ii) Well answered. Candidates were able to score 2/3.

Expected answers:
- Rainfall – growth of vegetation for grazing
- Water for animal consumption
- Relief – Mountainous/steep slopes not suitable for cattle farming
- Natural vegetation – needed for grazing by grazers (cattle and sheep) [3]

Credit should be given if/when candidates give an area/example as long as answers are aligned with those in the mark scheme but implied in such a context.

(b) Poorly answered. Candidates only named the land management strategies and failed to describe the strategies or explain their benefits.

Expected answers:
Contour ploughing
- Ploughing along the contours/across the slope to reduce or minimise soil erosion

Rotational grazing
- Rotating animals around camps to prevent overgrazing

Mixed cropping
- Growing two or more together on the same piece of land simultaneously/in one crop season

Crop rotation
- Planting different crops on a piece of land each season to maintain soil's nutrient content

Shelter belts
- Wind breakers – planting of trees around cultivated land – tree roots bind soil together and trees acts as wind beaks to prevent soil erosion

Organic fertilisers
- Artificial fertilisers pollutes
- Organic fertilisers helps bind soil particles together – helps maintain soil moisture content [8]

Credit should be given if/when candidates give an area/example as long as answers are aligned with those in the mark scheme but implied in such a context.

(c) Poorly answered. Candidates were not able to refer to examples of changes from intensive to extensive farming. Candidates gave general facts with limited evaluation. Answers lacked balance between socio-economic and environmental implications.

Expected answers:

Socio-economic

- Yields increase/improved food production
- Higher income by selling food/export
- Higher standard of living/reduce poverty
- Higher food production stimulates processing industry
- Need for equipment stimulates manufacturing industry
- Reduction in food prices
- Poorer farmers cannot afford technology
- People may suffer ill health because of contaminated water/food
- People lose jobs – taken over by machinery
- Rural-urban migration
- Too much food produced – leads to 'mountains' and 'lakes' and need later to be destroyed

Environmental

- Use of artificial fertilisers lead to water pollution/eutrophication
- Death of aquatic life in rivers/dams
- No roots to keep soil in place leads to soil erosion
- Less surface retention leads to less infiltration/more run-off
- Destroy habitats/ecosystems – loss of wildlife
- Improves irrigation leads to salinisation of soil
- Improper irrigation may cause a drop in the water-table because of extraction of water
- Insecticides kill useful insects/birds

(1 – 4) A basic answer where evaluation is limited or not present. Examples will be lacking.

(5 – 7) An answer which lacks balance and evaluation is likely to be limited in detail and may lack relevant examples

(8 – 10) A detailed and well balanced answer that look at the extent of environmental and socio-economic implication caused by the change. Candidates should give a detailed explanation with relevant examples

An answer where no reference is made to example (s) candidates can only score 2 marks max – given that 1 mark = socio-economic and 1 mark = environmental.

If candidates only discuss either socio-economic or environmental implications they can only score 6 marks max. [10]

[25]

5 (a) (i) Fairly well answered. In general candidates only compared the number of people with the amount of resources.

Expected answers:
Under-population occurs when there are too few people in the country (or region) to utilise the available resources (and technology for socio-economic development) [1]
Over-population occurs when the resources, (services and technology of the region or) country are not able to meet the basic needs of the population [1]

(ii) Poorly answered. Candidates gave reasons why areas are under populated instead of the features of an under-populated country.

Expected answers:
- Under-use of services e.g. medical, educational, etc.
- Shortage of labour force
- Higher income per capita GNP/GDP
- Higher standard of living
- Competition for resources is reduced
- Improved quality of life
- Political stability
- More, ageing population
- Closing down of services/facilities e.g. school, hospital, etc.
- Relaxed migration laws
- Wasteful use of resources

5 marks for fully developed points/features

Credit should be given if/when candidates give an example/area as long as answers are aligned with those in the MS but implied in such content. [5]

(b) Poorly answered. Candidates failed to compare HICs and LICs. Candidates explain reasons for high Birth Rates.

Expected answers:
- LICs have high birthrates, which lead to increased demand for services; Low birth rates, hence less demand for services
- They (LICs) are predominantly involved in primary activities so imports are higher than exports/negative trade balance; Mostly involved in secondary and tertiary activities thus exports are more than imports
- The presence of marginal lands cannot be utilised productively for food production; They use more agricultural technology e.g. irrigation to make marginal land more productive
- Low GDP/GNP cannot effectively be used to invest and invest in increased demand for resources; High GNP/GDP to effectively invent and invest in technology
- Limited capital/agricultural mechanisation leads to food shortages; More capital for agricultural mechanisation thus leads to more/surplus food
- Limited educational resources leads to fewer qualified personnel to develop the agricultural and manufacturing sector; More/better educational resources, more qualified personnel to develop agricultural and manufacturing sector
- Poverty is a leading cause of overpopulation, hence this lead to higher birth rates; Better/higher educational levels, better (technology) skills to develop more resources e.g. water supply
- Limited education levels, limits the technological skills to develop more resources such as water supplies countrywide; Better employment opportunities that narrow the gap between poor and rich, thus equal distribution of wealth
- Governments of LICs are unable to provide job opportunities to citizens which lead to uneven distribution of wealth; Have positive trade balance
- Most LICs have a negative trade balance due to inability to fully develop their natural resources; Political stability, money spent on all sectors
- Political unrest and wars, capital is mostly spent on acquiring weapons; Less chances for corruption and bribery – increased revenue generation
- Corruption and bribing reduces the generation of revenue of other sectors and retrenchment of workers; People more affluent therefore lower birth rates.

If and when candidates referred to specific countries' characteristics and statistics credit should be given. Development marks could be given up to max 3 for that detail, or candidates might earn the ideas marks through their example.

(c) Poorly answered. Candidates described the chosen policy, but not the difficulties of implementing the policy and the attempted solutions.

Expected answers:
Learners are expected to: explain that birth control measures can reduce over-population or does not reduce the population

- The introduction of laws e.g. one-child policy
- Family planning programs/policies nationally introduced in countries
- Education of women and girls are more likely to practice family planning and reduces social problems such as prostitution
- Better health care often encourages abortion
- If the resources and service are evenly and effectively distributed can it reduce the birth rate
- Limited capital to acquire and implement birth control methods
- Under utilisation of birth control methods due to religious/cultural/traditional beliefs
- Larger work force in rural communities to work on the land
- Some areas have a large reproduction group which cause a higher fertility rate
- Polygamy is commonly practiced in LICs

(1 – 4) Marks basic answer where evaluation is limited or not present.

(5 – 7) Marks – an answer lack balance and evaluation is limited in detail.

(8 – 10) A detailed and well-balanced answer which assess the extent to which birth control measures have reduce over-population in LICs.

If a candidate writes about more than one country the best answer on one country is to be marked and the rest of the answer ignored.

If candidates only refer to only either difficulties faced or only evaluation they can only score 6 marks max.

[10]
[25]

6 (a) (i) Poorly answered. Candidates lack knowledge.

Expected answers:
Urbanisation is the process by which an increasing proportion of the total population, usually that of a country (1) lives in towns or cities/urban areas compared to rural areas (1). [2]

(ii) Poorly answered. Candidates lack understanding of counter urbanisation (urban change).

Expected answers:

- Many houses in urban areas are poor, small or lack basic amenities
- High land prices contribute to less stand-alone homes with gardens increased
- Decline in secondary industries resulting in fewer jobs
- Higher unemployment in urban areas
- The deteriorating environment of the city due to traffic congestion and pollution
- Increased social problems, such as crime/prostitution
- Development in rural areas providing more job opportunities [5]

(b) Fairly well answered. Candidates could not explain changes that can take place in urban areas. Candidates failed to compare the problems of the CBD with the advantages of a location near the edge of the city.

Expected answers:

- High land values/high renting cost in CBD; lower values in edge of city
- Congestion of traffic/pedestrians in CBD; reduction of traffic, e.g. park-and-ride schemes
- Limited space in CBD; large land available
- Lack of space for expansion; large land for expansion in city edge.
- Poor access in CBD; good access as it can be nodal points/by-passes in city edge.
- More social problems in CBD
- More pollution in CBD
- Retail parks can be established to attract customers from wider areas in edge of city.

Higher quality answers will cover both problems of location in CBD and advantages of locations near to the edge of the city. [8]

If candidates refer to a specific example credit can be earned through the ideas marks or through their example.

(c) Poorly answered. Candidates showed limited knowledge of infrastructural problems. Evaluation was limited or not present.

Expected answers:
Learners are expected to provide an assessment of the problems of the transport system/power provision of a city and its solutions of these problems. The detail will depend on the chosen city and the chosen infrastructure.

Transport problems
- Overburden public transport
- High traffic congestion, resulting in slow traffic
- Narrow roads, leading to accidents
- Limited traffic lights causing slower traffic and frustration

Improvements and impact thereof
- Building of new and wider roads, resulting into more traffic into the CBD
- Introduction of traffic lights which synchronise traffic movement
- Encourage the use of public transport resulting in more taxi's (road rage may occur)/bus services may cause workers to arrive late to work
- The introduction of toll roads, reducing traffic influx and pollution
- Stricter laws/fines for traffic offenders
- Building bypasses and freeway to keep traffic away from CBD
- Construction of ring roads and slip-off roads in residential areas

Power problems
- Building and maintenance of adequate generation and distribution capacity.
- Population growth and the influence on electricity provision.
- Energy poverty
- Increased demand due to e.g. development in LIC's
- Increased technological demand especially in LIC's
- Industrial growth in LIC's
- Rising of levels of greenhouse gases in atmosphere
- Climate change

Improvements and impact thereof
- Move to renewables is costly
- Using of supergrids/underwater connections mainly HIC's – long before LIC's will reach.
- Electricity sharing – political and economic advantages but also disadvantages
- Reserve could be generated in certain countries but could change in geopolitics of energy.
- Any failure of, or attack on a global grid could cause have serious consequences, threatening supply in many countries. [10]

1 – 4 marks	Basic answers with limited knowledge of infrastructural problems of the chosen city Evaluation is limited or not present
5 – 7 marks	An answer which shows some knowledge and understanding of the infrastructural problems of the chosen city but evaluation of the solutions to these problems is limited.
8 – 10 marks	Detailed and well balanced answers

Make a response from detailed knowledge and understanding of the infrastructural problems of the chosen city. Provides an effective evaluation of solutions to these problems

An answer where no reference is made to an example of a city, candidates can only score 2 marks max given that one problem and attempt evaluation are provided.

Candidate must also indicate clearly which form of infrastructure they will discuss in order to attain marks. If candidates discuss only either problems or evaluation of attempts they can only score 10 marks max.

If a candidate writes about more than one country the best answer on one country is to be marked and the rest of the answer ignored.

[25]

7 **(a)** Well answered.

Expected answers:
Distance measured = 52 mm✓
52 x 50 m✓ = 2600 m✓ [3]

(b) Well answered.

Expected answers:
Vertical height = 1568 m – 1481 m
= 87 m✓
Horizontal distance = 28 mm x 50 m
= 1400 m✓
V/H = 87/1400
= 1400/87✓
= 1:16.09✓ [4]

If/when candidates' vertical height or horizontal distance was determined incorrectly, no marks should be awarded. However work with their mistake (wwm) when the gradient calculation is marked.

(c) Well answered.

Expected answers:
Furrows
Reservoirs
Perennial water Any **two** [2]

(d) Well answered.

Expected answers:
Ideas such as
Meandering
Braiding/island/eyots/woody island
Variable width
Perennial rivers
Non-perennial rivers
Flows NE
Perennial water Any **five** [5]

(e) Fairly well answered. Candidates used general knowledge i.e. knowing that cultivation takes place on gentle slopes. All mapwork answers must be obtained from the map, which was not done

Expected answers:
Away from higher lying land
Away from steep slopes
On lower lying land
On gentle slopes
Some areas next to the perennial rivers (flooding not a possibility)
Some areas away from perennial rivers (avoid flooding)
On lower lying areas with non-perennial rivers
Away from higher lying areas with non-perennial rivers Any **five** [5]

(f) **(i)** Fairly well answered. Candidates used general knowledge, but did not refer specifically to Parys.

Expected answers:
Can grow towards the north – lower lying land
Can grow towards the south – lower lying land
Can grow towards the west – lower lying land Any **two** [2]

(ii) Poorly answered. Candidates only named the factors and did not describe the factors.

Expected answers:
Arterial roads linking it to other towns - communication
Main road linking to towns – communication
Already existing secondary roads – communications with other parts of town
Railway communication already exists, therefore can just be extended
Water available all over area
Power lines towards the south [3]

(iii) Well answered.

Expected answers:
Provincial boundary/flooding of perennial river
Higher lying land/e.g. Ouwerskop
Excavation – presence thereof
Protected areas/presence of cemetery. [1]
[25]

POSITIVE SUGGESTIONS TO TEACHERS

- Teachers should expose candidates to a blend of case studies, emphasing the importance of varied case studies to broaden their knowledge on all subject matter.
- Candidates must write full sentences and not only list general facts.
- Learners must be taught to read questions carefully to understand what is expected to be answered.
- Candidates must ensure that they answer all components of a question.
- Candidates should answer each section on a new page.