



DEVELOPMENT STUDIES

0453/01

Paper 1

October/November 2018

MARK SCHEME

Maximum Mark: 80

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

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This document consists of **15** printed pages.

PUBLISHED**Generic Marking Principles**

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Question	Answer	Marks	Guidance
1(a)(i)	150	1	
1(a)(ii)	It is an inverse / negative correlation / the higher the GDP the lower the MMR It is not a perfect correlation / it applies in most cases / there are anomalies No credit for statistics	2	Credit any idea that indicates the correct relationship No credit for reference to people's income
1(b)(i)	75 Allow from 73 to 77	1	Credit almost/approximately, etc.
1(b)(ii)	Urban areas have better access than rural areas (in all regions) Some regions have better access than others / comparison between two or more regions The inequality between rural and urban areas is less in some regions than others	2	No credit for reasons or statistics or reference to developed/developing countries. Must state what the difference is between rural and urban
1(c)	A description of advice such as: <ul style="list-style-type: none"> • Taking extra care during pregnancy such as not carrying heavy loads / working in a dangerous environment • Avoiding harmful lifestyle choices / drugs / alcohol / smoking (to avoid complications at birth) • The importance of a balanced diet (to avoid deficiencies) / regular exercise (to keep fit) / reducing stress levels • The need to attend health centres if problems arise/ for regular check-ups • The value of giving birth in the presence of skilled personnel • Family planning (to allow the mother's body to recover between pregnancies) • The importance of disease prevention (to keep the body strong) • Hygiene/ sanitation/ drinking clean water (to prevent diseases) • Etc. Credit development (examples in brackets above) but no double credit	4	No credit for advice on health of newborn babies or reducing IMR. No credit for advice on HIV/AIDS

Question	Answer	Marks	Guidance
1(e)	<p>Explanation based on:</p> <ul style="list-style-type: none"> • Education in schools / media about how the disease is spread / methods of prevention • Availability of counselling services / HIV clinics so it is no longer taboo • Awareness of consistent use of condoms / availability of free / cheap condoms to reduce unprotected sex • Abstinence as can be sexually transmitted • Free testing service so people will know if they are HIV positive • Improved diet / hygiene / to keep body healthy to decrease the risk of infection • Male circumcision to reduce sexual transmission • Treatment for other sexually transmitted diseases to reduce chance of infection • Promotion of safer sex practices such as having one partner • Awareness of Parent to Child Transmission programmes • Avoid sharing needles/razors/wear gloves to treat open wounds to prevent transmission by blood • Early detection in pregnancy to reduce transmission to baby • Etc. <p>Credit development</p>	4	<p>Explanation required not just description Reference must be to condoms not contraception</p>

Question	Answer	Marks	Guidance
1(f)	<p>Level 1 (1 or 2 marks) simple statements with basic points made. Reference may be made to the fact that women / children will not need to spend hours each day fetching water or that clean water will help prevent disease. There is little development of ideas but candidates will have shown a basic understanding of the importance of easy access to clean water.</p> <p>Level 2 (3 or 4 marks) a sound attempt with points being developed. The fact that women will not spend hours fetching water can be developed to indicate how this will further impact on their lives in terms of having greater energy / more time to devote to other activities. The ways clean water can prevent disease and so improve lives can be explained in terms of hygiene issues.</p> <p>Level 3 (5 or 6 marks) a comprehensive attempt with points being well developed. For marks in Level 3, candidates would be expected to consider a few issues in depth rather than many different ideas that are only weakly developed. The issue of having more time / energy to devote to other activities could be further explained in terms of women being able to set up a small business and so bring more income into the home with the benefits that brings to families. Children would be able to attend school and hence improve their own life chances.</p> <p>The importance of clean water for disease prevention could be developed in terms of the problems caused by named water-borne diseases and the benefits for families of reducing cases of diarrhoea, etc. Details of how these can be prevented by adopting more hygienic methods in the home can be described.</p> <p>Credit reference to case studies.</p>	6	Credit reference to irrigation of crops if linked to improvement in the lives of women and their families. Answers must be focussed on women and families not community and country.

Question	Answer	Marks	Guidance
2(a)(i)	(Almost) 80%	1	
2(a)(ii)	North America and Europe	1	
2(a)(iii)	Labour Cotton Textiles Chemicals/dyes (Cheap) energy	3	
2(b)(i)	Intermediate technology: Tools / machinery / technology that is between simple and advanced (in terms of design and method of operation) / middle stage Goods can be produced faster than using simple hand tools They are cheaper than more complex machines. Examples	2	No credit for level of skill
2(b)(ii)	Economies of scale: The average cost per unit is reduced as more are produced / a savings in cost is gained by an increased level of production Reference to savings such as bulk purchasing / spreading marketing costs, etc.	2	

Question	Answer	Marks	Guidance
2(c)	<p>Explanation of methods such as:</p> <ul style="list-style-type: none"> • Use of renewable energy to limit climate change • Use of recycled materials to reduce mining of natural resources • Proper disposal of waste products so rivers / air are not polluted • Use of biodegradable packaging to reduce waste sent to landfill / plastic pollution of seas • Use of locally sourced products to reduce transport of goods • Payment of a living wage to workers to raise living standards • Reasonable working hours to ensure work-life balance • Meeting of health and safety regulations to reduce accidents • Reducing use of water to protect supplies for community / aquatic life • Use of treeless sites to reduce deforestation • Plant new trees to replace any chopped down • Set aside areas of land to protect them (from development) • Etc. <p>Credit development to Max 1</p> <p>Reserve 1 for environment and 1 for communities</p>	5	<p>Credit methods + purpose used by industries and governments and people</p> <p>Pollution must be qualified</p> <p>Answers must be related to limiting environmental destruction and reducing exploitation of communities</p>

Question	Answer	Marks	Guidance
2(d)	<p>Level 1 (1 or 2 marks) simple statements with basic points made. Reference may be made to the fact that the production of goods and services provides people with a job and therefore an income. Mention may also be made that the government receives taxes which it can spend on development projects. There is little development of ideas but candidates will have shown a basic understanding of how industries contribute to development.</p> <p>Level 2 (3 or 4 marks) a sound attempt with points being developed. The income gained by workers in industries could be used for paying for children to go to school which would increase literacy rates. The taxes received by the government could be used to improve roads which could lead to more trade.</p> <p>Level 3 (5 or 6 marks) a comprehensive attempt with points being well developed. For marks in Level 3, candidates would be expected to consider a few issues in depth rather than many different ideas that are only weakly developed. The income for families from the jobs provided from industrialisation could be explained in terms of ways that this helps to improve standards of living. The effect of this on development indicators such as literacy rates, child mortality, etc. could be stated to illustrate the points made.</p> <p>The wider impacts on development could be considered from the aspect of general wealth creation for the country through increased trade and taxes paid to the government by the workers and the industries. The improvements made in infrastructure will help to attract more MNCs which would provide more jobs. Health care would benefit from increased funding so people's life expectancy would increase and workers would be more efficient and so further development would be promoted.</p>	6	Accept industrialisation in the widest possible terms covering all sectors of the economy

Question	Answer	Marks	Guidance
3(a)(i)	23	1	No credit for %
3(a)(ii)	Nearly half the population are not economically active / small workforce High dependent population	1	
3(a)(iii)	Low level of development – 1 mark reserved <ul style="list-style-type: none"> • High population growth rate • High birth rate • High death rate • Large % population aged 0–14 • Small % urban population / only 23% live in urban areas / large rural • High child mortality rate • Low % population with access to improved water source • Low life expectancy 	3	No credit for figures No credit for high number of refugees
3(b)(i)	Problems such as: <ul style="list-style-type: none"> • Not enough clean water / food • Inadequate shelter / clothing • Lack of sanitation / privacy • Spread of diseases • Lack of waste disposal • Conflict with local people / racial tension / discrimination / fights for fuelwood • Difficulties in communication • Splitting up of families / emotional issues • Lack of education / health care • Difficulty in adapting to new surroundings • No jobs / poverty • High crime rate • Etc. 	4	No credit for problems in returning home or overcrowding Do not credit no food / shelter, etc.

Question	Answer	Marks	Guidance
3(b)(ii)	<p>Descriptions based upon ideas such as:</p> <ul style="list-style-type: none"> • Provide (emergency) aid / basic needs / healthcare / education in the home country • Provision of areas safe from danger / camps in home country • Organise peace talks • Encourage other countries to take some refugees • Advance planning for impact of natural disasters • Reduce corruption so aid is used more effectively • Build walls along border • Quotas • Etc. <p>Credit development</p>	5	It must be clear which country the candidate is referring to. E.g. 'the country affected by the disaster' or reference to a scheme 'to prevent people from migrating'.

Question	Answer	Marks	Guidance
3(c)	<p>Level 1 (1 or 2 marks) simple statements with basic points made. Reference may be made to push and pull factors such as poor service provision in rural areas and greater number of jobs available in towns. There is little development of ideas but candidates will have shown a basic understanding of why people want to leave rural areas and migrate to the towns.</p> <p>Level 2 (3 or 4 marks) a sound attempt with points being developed. For example, poor service provision in rural areas may be developed into the fact that children cannot gain an education due to a lack of schools or they have to travel long distances to reach one, often on foot. The jobs available in towns could be explained in terms of the type of jobs or the fact they are better paid which will help to increase the amount / type of food families can eat.</p> <p>Level 3 (5 or 6 marks) a comprehensive attempt with points being well developed. For marks in Level 3, candidates would be expected to consider a few issues in depth rather than many different ideas that are only weakly developed. For example, the absence of services such as schools can be developed to consider the problems caused by a lack of education such as low literacy rates and skills and therefore problems in finding good jobs and escaping the vicious cycle of poverty. The lack of good roads could be linked to the problem of travelling to work / taking goods to market / access to secondary schools / hospital facilities, etc.</p> <p>The attractions of towns could be developed by giving details of services not available in rural areas such as entertainment and details of how the quality of services is often improved. The impacts these have on the migrants could be considered. The subject of work could be fully developed in terms of the variety of jobs available and the presence of a thriving informal economy and the benefits that accrue from having an income.</p>	6	In order to be comprehensive (L3) the candidates would need to consider both the negative aspects of life in rural areas together with the attractions of life in the towns.

Question	Answer	Marks	Guidance
4(a)(i)	2005	1	
4(a)(ii)	1985–2020: 41% lost in 35 years (26–67) 2000–2020: 25% lost in 20 years (42–67) 2005–2020: 17% lost in 15 years (50–67) 2010–2020: 11% lost in 10 years (56–67) If this rate continues there will be no/few forests left in 50 years OR greater efforts will be made to conserve what forest remains so the rate of loss may decrease.	2	1 mark reserved for using data. Allow 2% tolerance either way. Allow approximation for example 'about 10% is now lost in a decade'
4(a)(iii)	<ul style="list-style-type: none"> Roads make access easier There is less forest to search Animals that lose their habitat wander onto farms Increased rarity Less cover from animals Etc. 	1	
4(b)(i)	Biodiversity – the variety / different types of plant and animal life	1	No credit for abundance or diversification
4(b)(ii)	Reasons why it is important to protect biodiversity: <ul style="list-style-type: none"> To aid sustainable development Insects pollinate flowers, crops, etc. Forest communities depend for their survival on variety of plants and animals (Eco)tourism The natural world is part of planet Earth (ethical reasons) Species could become extinct Removal of species affects the food chain / interdependence of species for survival Medicinal value For future generations Natural beauty Etc. 	3	No credit for plants provide oxygen / absorb carbon dioxide / reduce global warming No credit for prevention of soil erosion / flooding No credit for domesticated livestock
4(c)(i)	33 000 000 / 33 m tonnes	1	Units essential Tolerance of 32.5 m–33.5 m

Question	Answer	Marks	Guidance
4(c)(ii)	Palm oil production has increased The rate of increase was greater after 2000	2	
4(c)(iii)	Description based on: <ul style="list-style-type: none"> • Large size • Monoculture • Use of chemicals • Export of crop /cash crop • some operations are mechanised/labour intensive/capital intensive • High output <p>Credit development</p>	3	Do not credit that plantations are usually found in tropical areas, or that they occur on previously forested land. No credit for labour or capital intensive or mechanisation without qualification. No credit for irrigation

Question	Answer	Marks	Guidance
4(d)	<p>Levels marking:</p> <p>Level 1 (1 or 2 marks) simple statements with basic points made. Reference may be made to the creation of national parks / areas of conservation, the use of quotas to limit logging, laws to prevent illegal activities, etc. There is little development of ideas but candidates will have shown a basic understanding of the ways forest may be protected.</p> <p>Level 2 (3 or 4 marks) a sound attempt with points being developed. For example, the creation of national parks could be linked to the importance of income from the tourist industry / ecotourism. A method used to prevent illegal logging such as increased police patrols / curbing corruption could be explained.</p> <p>Level 3 (5 or 6 marks) a comprehensive attempt with points being well developed. For marks in Level 3, candidates would be expected to consider a few issues in depth rather than many different ideas that are only weakly developed. The creation of national parks could be developed in terms of a tourist attraction with local communities benefitting from jobs as guides and increased demand for local crafts. Local people will seek to protect the forest if their livelihoods depend upon it. Income from tourists could be used to set up anti-poaching patrols to prevent further loss of large animals that attract tourists.</p> <p>Government action could be developed in terms of enforcing laws to stop illegal logging, supporting CITES and supporting economic activities that use the forest sustainably. Quotas, and methods of selective felling could be explained as ways to leave large areas of forest. The need to leave corridors for movement of animals between larger areas of forest is also a conservation method that helps to retain biodiversity. Reference may be made to efforts that can be made by governments and consumers worldwide to support companies that produce timber and other products sustainably and not from clearing tropical forests. The Forest Stewardship Council and Rainforest Alliance may be used as examples.</p>	6	No credit for afforestation