



Cambridge IGCSE™

DEVELOPMENT STUDIES

0453/01

Paper 1

October/November 2021

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.

Cambridge International is publishing the mark schemes for the October/November 2021 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

This document consists of **17** 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.

PUBLISHED**Social Science-Specific Marking Principles
(for point-based marking)****1 Components using point-based marking:**

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

- a** DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
- b** DO credit alternative answers/examples which are not written in the mark scheme if they are correct
- c** DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons ...).
- d** DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- e** DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
- f** DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
- g** DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

Question	Answer	Marks	Guidance
1(a)(i)	33–54 %	1	Credit responses without % sign.
1(a)(ii)	<p><u>Description of the main features of the map:</u></p> <ul style="list-style-type: none"> • High(er) (est) / 78–100 % in North America / Europe / Australasia • <u>Mostly</u> high in South America • Moderate / Varies in Asia / Africa • (Mostly) Low(er) (est) / low / scarce / 0–32 % in Africa <p>E.g. North America is higher / better than Africa / Asia = 2 (Max. 2 marks for a comparative statement)</p>	3	<p><i>No credit for reference to developing/developed/MEDCs etc.</i></p> <p><i>Named continents only.</i></p> <p><i>Do not award two marks for references to the same continent.</i></p>
1(b)(i)	<p><u>Reasons for reduced services in rural areas:</u></p> <p>RESERVE 1</p> <ul style="list-style-type: none"> • It's too expensive/not cost effective for governments to invest/build/provide services in rural areas. / It's more cost effective for governments to invest/build/provide services in urban areas. • Governments less likely to invest in rural areas due to low population density/people too spread out/fewer people benefit/Governments invest in services in towns as high population density/more people/more people benefit • Rural areas are remote/difficult to reach/longer distances • Rural dwellers more likely not be able to afford the services/Urban dwellers more likely to be able to afford services • Fewer voters in rural areas/more voters in urban areas • Traditional methods are hard to overcome/rural people may refuse to use the services / lack of education <u>about the importance of hygiene</u> <p>Etc.</p>	3	<p><u>Reserve 1</u> for the idea of cost to the government</p> <p>Allow valid urban perspective.</p> <p>Less money is invested in rural areas by government = ^</p>

Question	Answer	Marks	Guidance
1(b)(ii)	<p><u>Description of problems based on ideas such as:</u></p> <ul style="list-style-type: none"> • Schools may not have toilets • Lack of privacy/unhappy about being seen / concern about periods • Safety fears/fear of being attacked and raped • Use of dirty water etc. / have to spend longer getting clean water • Spread of disease is more likely / increased mortality (not rate) / difficulties in childbirth • Children are reluctant / unable to go to school – allow only as a dev of the other points <p>Etc.</p>	3	Max 2 for disease / sickness
1(c)	<p><u>Explanation of government measures:</u></p> <ul style="list-style-type: none"> • Provide women with credit facilities (1) so they can purchase fertilisers etc. (DEV) • Allow women to sit on Rural Development Boards (1) to make women's voices heard (DEV) • Allow women to own land (1) as they will then keep it in good condition (DEV) • Make <u>agricultural</u> services / training <u>schemes</u> available to them / advice from experts on new technology (1) to allow them to apply knowledge (DEV) • Equality awareness programmes / Gender equality laws (1) to become more accepted as farmers (DEV) • Provide clean water (1) so women have more time to spend on farming (DEV)/ Provide stoves/electricity (1) so women have more time to spend on farming (DEV). • Provide free day care / schooling for children(1) So women can focus on farming (DEV) <p>Etc.</p>	4	<p>1 + 1 1 + 1</p> <p>Max of 1 DEV for each simple point. Max of 2 simple points.</p> <p>DEV points should relate directly to increasing food production.</p> <p>Help to increase yield/grow more crops = 0</p> <p>Provide knowledge/provide education on their own = ^</p> <p>No credit for suggesting governments give free seeds, fertilisers etc.</p> <p>Do not double credit the same development point.</p>

Question	Answer	Marks	Guidance
1(d)	<p>Levels marking:</p> <p>Level 1 (1 or 2 marks) – simple statements with basic points made.</p> <p>Reference may be made to the availability of vaccinations for childhood diseases, advice on pre-natal care for pregnant mothers, access to medicines / treatment for accidents/speed of being able to access health centres/availability/health education etc.</p> <p>There is little development of ideas but candidates will have shown a basic understanding of the benefits of local health centres.</p> <p>Level 2 (3 or 4 marks) – a sound attempt with points being developed.</p> <p>For example, mothers will find it easier to take their children for vaccinations and so diseases such as measles can be prevented.</p> <p>Level 3 (5 or 6 marks) – a comprehensive attempt with points being well developed. For marks in Level 3, ways that reduce both maternal and child mortality rates would need to be considered in order to make the answer comprehensive. Candidates would be expected to consider a few issues in depth rather than many different ideas that are only weakly developed.</p> <p>For example, the availability of education could be developed in terms of how advice can reduce mortality rates. Such as advice on hygiene in the home can reduce the risk of diarrhoea which causes children to become weak and more susceptible to other illnesses. Pregnant mothers can be taught the importance of a good diet for both themselves and their baby as well as the need for clean conditions during childbirth. Education on family planning would give a mother’s body time to recover between pregnancies and each child could receive a better standard of living with fewer in the family.</p> <p>Other themes may focus on the availability of vaccinations and medicines to prevent or treat diseases (e.g. HIV/AIDS), as well as the provision of vitamin and mineral supplements. The importance of prevention rather than cure may be stressed as key to reducing both maternal and child mortality rates.</p>	6	<p>This question is about the access to services and the consequences of this for women and children.</p> <p>To access Level 3 the candidate needs to address both maternal and child mortality.</p>

Question	Answer	Marks	Guidance
2(a)(i)	Allow 2050 – 2055	1	
2(a)(ii)	<p><u>Description of change</u></p> <ul style="list-style-type: none"> • Overall increase/from 2000–2100 the population increases • Between 2020 and 2050 the population rises slowly • From 2050 to 2100 the population rises more quickly / After 2050 the population rises more quickly 	2	
2(a)(iii)	Kenya’s population of 15–64 year olds continues to grow but Argentina’s falls (after 2050)	1	Candidates need to mention both Argentina and Kenya for credit.
2(a)(iv)	<ul style="list-style-type: none"> • The population that is not economically active / not working • Those that rely on those who are working / the economically active / the population that works 	1	Depend on others = 0 Those who can’t provide for themselves = 0
2(a)(v)	<ul style="list-style-type: none"> • 35 – 36 million 	1	
2(b)	<p><u>Reasons why governments need to know future population changes:</u></p> <ul style="list-style-type: none"> • In order to plan / budget for the building/provision of more public services / facilities / resources • Example, such as govt. spending, schools, hospitals, pro-natalist/anti-natalist policies, care homes, houses, roads, sustainability issues etc. (allow infrastructure) <p>(Max 2 without specific changes)</p> <p>Specific changes:-</p> <ul style="list-style-type: none"> • More children = more schools needed (1) • More elderly = more hospitals/care homes/spending on pensions needed (1) • More economically active = increased tax revenue to fund infrastructure projects etc.(1) 	3	<p>Governments need to plan ahead = 0</p> <p>Allow converse arguments but don’t double credit same example</p>

Question	Answer	Marks	Guidance
2(c)	<p><u>Explanations based on the following ideas:</u></p> <ul style="list-style-type: none"> • Contraception is unavailable / too expensive • Some religions do not permit the use of contraception • Lack of education of family planning • Children are needed to work on farms / earn money • Children are needed to look after elderly • Lack of careers for women • Status symbol • Cultural beliefs / early marriage • High child mortality rate • Government policies to raise birth rate • Inward migration <p>Etc.</p> <p>Reasons for falling death rate such as:</p> <ul style="list-style-type: none"> • Improvements in quality of and accessibility to health facilities • Education into methods of disease prevention / exercise to reduce obesity • Increased access to improved water supplies / good sanitation reduces waterborne diseases • Improved diets / better nutrition / better food supply <p>Etc.</p>	5	<p><u>Reserve 1</u> mark for falling or low death rate / higher life expectancy</p> <p><u>Reserve 1</u> mark for high birth rate / increased birth rate / birth rate much higher than death rate</p> <p><u>Max 3</u> for reasons why there is a low death rate/higher birth rate.</p> <p>More babies being born compared to the death of babies = 0</p>

Question	Answer	Marks	Guidance
2(d)	<p>Levels marking:</p> <p>Level 1 (1 or 2 marks) – simple statements with basic points made</p> <p>Reference may be made to the need for more health services / care homes, a shortage of workers etc.</p> <p>There is little development of ideas but candidates will have shown a basic understanding of the problems caused by an ageing population.</p> <p>Level 2 (3 or 4 marks) – a sound attempt with points being developed or exemplified</p> <p>A problem caused by more older people in the population could be explained further or a solution to it could be offered.</p> <p>For example, the demand for more health services could be explained in terms of the increasing needs of elderly people in terms of hospital visits as well as medicines, all of which cost the country more money.</p> <p>To solve the problem of a shortage of workers, the government could encourage immigration of the working age group.</p> <p>Level 3 (5 or 6 marks) – a comprehensive attempt with points being well developed.</p> <p>For marks in Level 3, a description of the problems as well as a suggestion of some solutions would need to be considered in order to make the answer comprehensive. Candidates would be expected to consider a few issues in depth rather than many different ideas that are only weakly developed.</p> <p>Candidates could develop the idea of the need for more services for the elderly including health and general care and how these could be provided both by the state and family members. The problem of finance and the need for relatives to take time off work could be considered as possible solutions.</p> <p>The issue of shortage of workers could be explained in terms of the problems this poses for the growth of the economy and consequently for social aspects of development. Possible solutions such as the raising of the retirement age could be considered together with the need to attract foreign workers. More able candidates may even consider some of the problems caused by the solutions they have suggested.</p>	6	<p>Credit solutions found by individuals.</p> <p>To access Level 3 candidates must address both problems and solutions.</p>

Question	Answer	Marks	Guidance
3(a)(i)	China and United States	1	
3(a)(ii)	Malaysia	1	
3(a)(iii)	6 (%)	1	
3(a)(iv)	<p><u>Problems for Niger:</u></p> <ul style="list-style-type: none"> • It is land-locked/has no port (for imports/exports by sea) • It has to rely on its neighbours to export and import by sea • Neighbouring countries through which goods are carried by road/rail may have unstable governments/threat of goods being hijacked/costs attached to corruption (making it difficult to import/export goods) • Export of many goods by air is expensive • May have to pay customs/tariffs to surrounding countries to transport goods to/from Niger • Greater distance / time / costs from (some) main trading partners / USA and China / for imports and exports to reach destination 	2	
3(b)	<p><u>Reasons why it is important for countries to trade:</u></p> <ul style="list-style-type: none"> • Countries cannot produce everything they need / to obtain raw materials / increase variety of products • Countries need to gain foreign currency / income / GDP / economic growth • Economic growth promotes investment in infrastructure / services of country • Trade opens up larger markets • Trade promotes cooperation between countries / reduce risk of conflict • Creates jobs <p>Etc.</p>	4	<p>Credit 4 simple points.</p> <p>Because they have to import/export = 0</p>

Question	Answer	Marks	Guidance
3(c)	<p><u>Explanation of problems for farmers exporting agricultural goods:</u></p> <ul style="list-style-type: none"> • Agricultural products are subject to price / demand fluctuations (1) and farmers have to make decisions before the state of markets is known DEV • Importing countries might impose taxes / tariffs (1) Reducing income / amount of exports for farmers / making it more difficult to sell DEV • If supplies of a crop increase / more competition/new supplier emerges (1) then prices will fall (DEV) but farmers costs do not fall DEV • Some crops are perishable (1) and farmers usually don't have good transport services DEV • Climate change/Bad weather/natural disasters/pests can damage a crop / outbreak of diseases (1) and make it worth less money DEV • Consumer fashions for food change (1) but change can only take place slowly on farms DEV • Alternative products may result in a market disappearing (1) • Agricultural products have no added value (1) and prices may be lower than the cost of production DEV • Trade is often run by monopolies (1) which drive down prices paid to farmers DEV • Farmers may lack the technology/fertilisers (1) and find it hard to compete in world markets DEV <p>Also credit DEVs that relate to <u>specific</u> falling standards of living as a result of any of the above (e.g. unable to afford to send children to school)</p> <p>Etc.</p>	5	<p>1 + dev + dev + dev + 1 1 + dev + dev, 1 + dev 1 + dev, 1 + dev + 1 1 + 1 + 1 + 1 + 1</p> <p>Do not credit a development that stands alone or duplication of developments.</p> <p>Assume that farmers growing crops for export have a level of competence.</p>

Question	Answer	Marks	Guidance
3(d)	<p>Levels marking: Level 1 (1 or 2 marks) – simple statements with basic points made</p> <p>Reference may be made to the abundance of cheap labour, lack of government regulations on working conditions, few environmental protection laws, tax incentives, access to other country's markets etc.</p> <p>There is little development of ideas but candidates will have shown a basic understanding of the reasons why MNCs set up in developing countries.</p> <p>Level 2 (3 or 4 marks) – a sound attempt with points being developed or exemplified For example, few government environmental laws may mean waste can be disposed in rivers which reduces the company's costs.</p> <p>A government may give a tax holiday to an MNC when they pay no tax at all for the first few months and this makes it cheaper for the company to operate.</p> <p>Level 3 (5 or 6 marks) – a comprehensive attempt with points being well developed.</p> <p>Candidates would be expected to consider a few issues in depth rather than many different ideas that are only weakly developed.</p> <p>For example, the lack of protection of the environment and working conditions could be fully developed to explain that these government measures make it easier and cheaper for MNCs to operate. The use of child labour, low pay for long hours, waste disposed legally in rivers and the atmosphere, few safety precautions to protect workers etc. could all be considered.</p> <p>Similarly, financial incentives could also be considered in depth such as tax holidays, reduced rents, Free Trade Areas to reduce tariffs etc. Services provided by the government could be included such as the provision of modern factory units, improved transport networks etc.</p> <p>Credit should be given for reference to case studies.</p>	6	The question is about MNCs setting up in <u>developing</u> countries.

Question	Answer	Marks	Guidance
4(a)(i)	<p><u>Features of the tourist resort:</u></p> <ul style="list-style-type: none"> • Hotels/buildings/apartments • Bars / Umbrellas / Restaurants • Boats / Boat trips / Fishing boats • Beach / Rocks • Sea / Water / River • Trees / Vegetation / Greenery • Mountains / Hills • Harbour / Port/Jetty/walkway • Clear skies <p>Etc.</p>	3	<p>Fishing = 0 Land = 0 Vans/cars = 0</p>
4(a)(ii)	<p><u>Problems for the fishermen:</u></p> <ul style="list-style-type: none"> • Young people get jobs in the hotels/there are fewer to carry on fishing / traditional culture • Tourist boats/jet skis could disturb the fishing grounds • Fishermen priced out of local housing market / loss of homes due to hotel building • Water / sea pollution • Overfishing <u>to supply the tourist market</u> <p><u>Solutions to conflict:</u></p> <ul style="list-style-type: none"> • Make working in fishing more attractive • Traditional culture could become part of the tourist attractions • Areas could be set aside for traditional fishing techniques. • Motorboats could be banned • Restrict sale of local houses to local people • Stricter controls / fines for waste disposal / leakages / rubbish bins etc. • Fishing quotas / restricted areas for fishing / fish farms • Encourage / Inform tourists how to respect the local culture • Limit number of tourists <p>Etc.</p>	4	<p>Two marks for two reasons and two marks for appropriate solutions linked to reasons given</p> <p>Don't double credit solutions</p>

Question	Answer	Marks	Guidance
4(b)(i)	<p><u>Reasons why governments encourage oil production:</u></p> <ul style="list-style-type: none"> • To gain foreign currency / increase GDP/ make more profit / boost economy / improve balance of payments • To reduce <u>amount spent on oil imports</u> / improve balance of trade • To gain tax from the oil companies / people working in the oil industry • To provide jobs / gain new skills etc. • To supply industry/transport/homes with cheaper fuels • To reduce dependence on overseas suppliers / to increase energy security / do not have alternative energy sources <p>Etc.</p>	3	
4(b)(ii)	<p><u>Explanation of why the local people are concerned:</u></p> <ul style="list-style-type: none"> • Oil spills ruin beaches/oil spills kill dolphins/birds (1) and tourists disappear DEV • It might take a long time to attract the tourists back (1) and people lose their jobs DEV • Polluted seas mean fish are not edible (1) so the fishing industry declines DEV • Loss of marine species affects the food chain (1) locals lose sources of food DEV • Loss of scenic beauty (1) and locals lose income from the tourists DEV • Possible absence of safety measures (1) may lead to oil spills DEV • <p>Etc.</p>	4	<p>1 + dev, 1+ dev 1 + dev + dev + 1 1 + dev + dev + dev</p> <p>Do not double credit the same development point.</p> <p>Watch out for responses directly lifting question material e.g., scepticism about oil spills in other places.</p>

Question	Answer	Marks	Guidance
4(c)	<p>Levels marking:</p> <p>Level 1 (1 or 2 marks) – simple statements with basic points made</p> <p>Reference may be made to effects such as loss of life and property, destruction of bridges etc. There is little development of ideas but candidates will have shown a basic understanding of the immediate effects of a natural disaster. References may also be made to the long-term impact on development such as children were unable to go to school.</p> <p>Level 2 (3 or 4 marks) – a sound attempt with points being developed or exemplified</p> <p>For example, clean water supplies were polluted by the flood water so people suffered from water-borne diseases. The earthquake destroyed factories so people were unable to go to work and poverty increased.</p> <p>Level 3 (5 or 6 marks) – a comprehensive attempt with points being well developed or exemplified</p> <p>For marks in Level 3, a description of the immediate effect the natural disaster had on local communities as well as an explanation of the longer term impact on the development of the country would need to be considered in order to make the answer comprehensive. Candidates would be expected to consider a few issues in depth rather than many different ideas that are only weakly developed</p> <p>The issue of destruction of work places and infrastructure could be developed in terms of the immediate effects on the local people of having no income and longer term impacts on the economy. The fact people would have no money for basic needs, education, healthcare etc. and the government would receive fewer taxes to use to build schools, repair damage etc. are all valid points that could be used to develop the answer fully. Similarly, problems for communities that have lost everything could be explored as well as the need for governments to spend money on disaster aid rather than on health and education projects that would aid social development such as improved literacy rates and life expectancy.</p>	6	<p>Level 2 max 4 if coronavirus is given as a natural disaster.</p> <p>All other responses must address both local and long-term impacts to access Level 3.</p> <p>Candidates who have applied their knowledge of immediate and long-term impacts of a natural disaster in a comprehensive manner should be able to access the full range of marks.</p>