



Cambridge IGCSE™

DEVELOPMENT STUDIES

0453/02

Paper 2

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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 **13** printed pages.

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.

**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.

The marking scheme attempts to give guidance about the requirements of each answer and lists a number of responses, which will earn marks along with the general principles to be applied when marking each question.

It should be noted that candidates can earn marks if their answers are phrased differently provided they convey the same meaning as those in the mark scheme. **THE CANDIDATES DO NOT NEED TO USE THE SAME WORDING TO EARN MARKS.**

The notation `etc` at the end of an answer in the mark scheme signifies that there may well be other correct responses or examples that can be given credit. Providing the statement is true, relevant to the question asked and not repetition of a previous point made credit should be given.

A point made within one sub-section which is an answer to the question set in a different sub-section should not be given credit as each sub-section asks different questions which require independent answers.

The mark scheme uses semi colons (;) to separate marks and diagonals to separate alternative answers.

During coordination the mark scheme is modified to add points agreed after discussion or to delete any points not allowed. All examiners should ensure that their modified scheme is fully up-to-date before marking begins.

Marking Mechanics.

Point marking is used for most sections of each question, although marks are available in specified questions for development of appropriate points. Ticks should be used to clearly indicate where a mark has been allowed. Where a development point has been allowed the symbol “DEV” should be placed adjacent to the tick. The number of ticks should always be equal to the total number of marks awarded. Only one development mark for each mark scheme point please.

Where a candidate makes a point which is not quite sufficient for credit an upturned `V` insert symbol should be used. If after careful consideration a mark is awarded which gives `benefit of doubt` to the candidate the letter `J` should be placed adjacent to the tick (i.e. the candidate has `just` achieved the mark).

Crosses are acceptable to signify wrong answers and the letters `I/R` should be used to indicate those which are irrelevant.

Levels of response marking is used for some questions.

Thus it is the quality of the response that determines which level an answer is achieved rather than the quantity of statements contained within it. However, once assigned to a level the mark achieved within that level is determined by the number of points made.

Details are given in the marking scheme for each sub-section, however generally levels 1 and 2 are distinguished by whether statements are simple (level 1) or developed/elaborated (level 2). A candidate can immediately enter L2 by making developed points without making any L1 statements.

In order to achieve L3 a candidate must fulfil further requirements which are specified in the marking scheme and/or the answer should be comprehensive.

Where statements are assigned levels by the examiner this should be indicated by the use of L1 and L2 next to the statements. Ticks should **not** be used on answers that are marked using levels of response marking. L1 annotation should be removed once a L2 is awarded for an answer. L3 annotation is not used within the answer though it may be used as a summary level at the end of a response.

Question	Answer	Marks
1(a)(i)	Movement of people from one place/country/area to another 1 mark	1
1(a)(ii)	International = Migration from one country to another Forced = People do not have a choice whether to migrate or not Voluntary = People choose to migrate 2 marks for all 3 correct 1 mark for 2 correct 0 marks for 0/1 correct	2
1(a)(iii)	An economic migrant is seeking more wealth/job/money/higher pay A refugee is escaping a threat to his/her life/forced to move/displaced/no choice/have to flee/lack of safety/escape natural disaster or e.g. 2 @ 1 mark	2
1(a)(iv)	Ideas such as: • Drought; • Volcanic eruption; • Tropical storm/cyclone/hurricane/typhoon/tornado; • Earthquake; • Tsunami; • Flood; • Wildfire; • landslide etc. 3 @ 1 mark	3
1(b)(i)	10.1(US\$ billion) 1 mark	1
1(b)(ii)	Mexico....China.....Saudi Arabia Note: Correct order needed 1 mark	1

Question	Answer	Marks
1(b)(iii)	<p>Ideas such as:</p> <ul style="list-style-type: none"> • they can buy more food; • they can send their children to school; • they can afford health care/medicines; • they can buy/improve their homes; • they can improve their farms/buy fertilizers/buy machines; • set up a small business or e.g.; • they can obtain water supply/dig well; • they can buy fuel or e.g.; • they can buy specified items; • business get more trade/income etc. <p style="text-align: right;">3 @ 1 mark</p>	3
1(b)(iv)	<p>Ideas such as:</p> <ul style="list-style-type: none"> • Underpopulation/resources not used • loss of working population/loss of young population/jobs not filled/loss of economically active/less pressure of job; • shortage of skills or example/lack of innovation/brain drain; • decline in economy/production is lower/GNP reduced/economic growth reduced/slows development/less exports; • hard to produce enough food/loss of farmers/women and children forced to farm; • families split up; • loss of traditional culture; • less taxes paid/taxes increases/less government money e.g. for pensions; • ageing population/increased dependency ratio; • gender imbalance; • closure of businesses/services/businesses make less profit/less demand/less demand for business/service to survive; • more difficult to defend the country; • country becomes less attractive for investors etc. <p style="text-align: right;">4 @ 1 mark</p>	4

Question	Answer	Marks
2(a)	Ideas such as: <ul style="list-style-type: none"> • decrease in percentage living in rural areas; • from 70/71% to 30% or by 40/41%; • increase in percentage living in urban areas; • from 29/30% to 69/70% or by 39-41%; • before 2008 a greater percentage lived in rural areas but after that date a greater percentage lived in urban areas etc. <p style="text-align: right;">4 @ 1 mark</p>	4
2(b)(i)	New York <p style="text-align: right;">1 mark</p>	1
2(b)(ii)	Mumbai <p style="text-align: right;">1 mark</p>	1
2(b)(iii)	Ideas such as: <ul style="list-style-type: none"> • migration from rural areas/countryside; • availability of work in urban areas/better pay/business opportunities; • more hospitals/better health care/doctors/clinics in urban areas; • more access to education in urban areas/more schools etc. • more entertainment/bright lights syndrome; • more secure food supply in cities than rural areas; • access to water; • access to sanitation • access to electricity network; • high/increased birth rates – allow 1 mark for a reason; • drought; • natural disaster (or e.g.) / war etc. <p>(Note: Candidates can refer to rural pushes but no double credit)</p> <p style="text-align: right;">5 @ 1 mark or development</p>	5
2(c)(i)	95% (accept 94 to 96) <p style="text-align: right;">1 mark</p>	1
2(c)(ii)	Cairo/Lagos/Kinshasa <p style="text-align: right;">1 mark</p>	1

Question	Answer	Marks
2(c)(iii)	<p>Line graph:</p> <p>1 mark for choice of scales; 1 mark for labelling `population (millions)` on y axis; 1 mark for labelling `years` on x axis; 2 marks for correct plotting</p> <p style="text-align: right;">5 marks</p>	5
2(d)	<p>Levels marking</p> <p><u>Level 1 (1/2/3 marks)</u> Basic points referring to advantages of chosen scheme.</p> <p><u>Level 2 (4/5 marks)</u> Developed points referring to advantages of chosen scheme.</p> <p><u>Level 3 (6/7 marks)</u> A full and sophisticated evaluation of the options with developed points about advantages of chosen scheme and disadvantages of schemes rejected.</p> <p>Candidates can choose any of the four methods and justify them. Statements to be credited which explain why they have chosen the method and why they have rejected the other three:</p> <p>E.g. <u>Give low interest loans to farmers in rural Kenya</u></p> <p>It is better to treat the cause of the problem rather than the symptoms; farmers will be able to buy new machinery/seeds which will cause less migration; as they will be able to use more efficient processes which will obtain higher yields (dev); preventing migrants from entering the city may not work as it is impractical as not all entrance points can be patrolled; and migrants may bribe local police/guards; Many migrants would not be able to afford even low cost apartments due to poverty; Setting aside land with public washrooms, piped water and toilets will mean the migrants do not have adequate homes; and land is in short supply/possibly not available for this (dev) etc.</p> <p>Note: Do not double credit direct opposites</p>	7

Question	Answer	Marks
3(a)(i)	<p>Alongside/near/next to the river/lake/water</p> <p style="text-align: right;">1 mark</p> <p>Ideas such as:</p> <ul style="list-style-type: none"> • Self built; • Close together/cramped/overcrowded/congested; • Unplanned; • Made from corrugated/metal/iron sheets; • Wood/cloth/sacking/plastic/polythene • Flimsy/insecure/unstable; • No windows/no glass/metal grid; • One on top of each other/3 story etc. <p style="text-align: right;">4 @ 1 mark</p>	5
3(a)(ii)	<p>Ideas such as:</p> <ul style="list-style-type: none"> • Safety of students / mugging / theft / crime / dangerous place; • Hassle from residents / children; • People being reluctant to answer questions / won't answer truthfully/scared to take part/lack of trust; • People may lie /embarrassed to give correct answer; • People are busy doing something / will not cooperate; • People may be aggressive/rude • No space to walk around or observe/ Getting lost / difficult to get to / poor transport links to squatter settlement; • Not finding enough people to make the survey accurate / people working away from squatter settlement • Language difficulties for people to understand the survey / do not speak English; • Polluted water / air / rubbish / unhygienic conditions / student illness / disease / open drains or sewers / rats <p style="text-align: right;">3 @ 1 mark</p>	3
3(b)(i)	<p>To practice fieldwork techniques / find out any problems / won't make mistake in real fieldwork /correct errors / get experience;</p> <p>To make sure that students understand instructions / know what to do / are confident;</p> <p>To practise working as team / so everyone knows what to do;</p> <p>To test the questionnaire/see if the questionnaire works etc.</p> <p style="text-align: right;">2 @ 1 mark</p>	2

Question	Answer	Marks
3(b)(ii)	<p>15 people:</p> <ul style="list-style-type: none"> • Not enough for a reliable sample; • Too few responses to reach a conclusion / to make study worthwhile; • Not represent all people/not representative/only represents a few of the residents; • Not full range of answers; <p>300 people:</p> <ul style="list-style-type: none"> • Take too long / long time to complete; • Too many responses to produce the results from / analyse / process / put into data table; • May not find 300 people; <p style="text-align: right;">2 @ 1 mark</p>	2
3(b)(iii)	<p>Systematic sampling; Ask every tenth person / regular intervals; Avoid bias / fair test / quick method</p> <p>OR</p> <p>Random sampling; Use random numbers / ask next person they meet /ask anybody / any order / no specific order ; Random numbers avoids bias / quick method / fair test</p> <p>OR</p> <p>Stratified sampling; Ask appropriate age / gender balance / in proportion to population / put into groups; Avoids bias / get proportionate sample / questionnaire contains different age groups & gender /fair test</p> <p>1 mark for name, 1 mark for description, 1 mark for explanation</p> <p>If method is wrong or blank credit appropriate description and explanation of one sampling method</p> <p style="text-align: right;">3 @ 1 mark</p>	3
3(c)(i)	<p>Completion of pie chart to look for work = 36 (37)% to earn money for my family 24 (23)%</p> <p>1 mark for dividing line at 36%, 1 mark for shading</p> <p style="text-align: right;">2 marks</p>	2

Question	Answer	Marks
3(c)(ii)	<p>Ideas such as:</p> <ul style="list-style-type: none"> • It is visual/easy to interpret/understand/easy to read/shows information clearly; • Comparisons are easy/shows the differences; • Figures do not show change over time/are not continuous; • Figures do not show how the whole is divided up etc. <p style="text-align: right;">3 @ 1 mark</p>	3
3(c)(iii)	<p>Ideas such as:</p> <p>Flooding:</p> <ul style="list-style-type: none"> • Houses often built near water/ on floodplain / lowland / near river / on flat land/near marshes/near swamps • No flood protection barriers; • Poor drainage / no pipes so water cannot drain away; • Flimsy housing/easily damaged/washed away etc. <p>Fire:</p> <ul style="list-style-type: none"> • Houses are built of wood / scrap materials / easily burn / flammable; • Houses are very cramped / close together/fire can easily spread; • Difficult for fire service to access community / no local fire service/lack of water to extinguish fire; • Electrical cables / wires may not be safe / exposed; • Gas leaks due to poor pipes/fires cause by gas flames/explosions; • Open fires; • Lack of regulations to prevent fire etc. <p>Note: MAX 3 on fire/flooding</p> <p style="text-align: right;">4 @ 1 mark</p>	4
3(c)(iv) Q1	<p>Yes/Results show that most people have migrated to Mumbai for employment; More than half / more than 50% / 60% / most / majority moved to look for work / get a job / for employment OR Less than half / less than 50% / 40% moved for other reasons; 18 moved to look for work and 12 moved to earn money to look after family (NEED BOTH); 30 out of 50 moved for work related reasons</p> <p style="text-align: right;">3 @ 1 mark</p>	3
3(c)(iv) Q2	<p>No/There are more difficulties (than advantages); 135 advantages and 155 difficulties/20 more difficulties; there are more types of problems; 6 (named) benefits & 7 (named) problems The main problem has a higher score than the main benefit 32 replies for highest scoring problem and 29 replies for highest scoring benefit</p> <p style="text-align: right;">4 @ 1 mark</p>	4

Question	Answer	Marks
3(d)	<p>Levels marking</p> <p><u>Level 1</u> (1 to 3 marks) Simple statements which identify possible methods which could be used to investigate the problem of water pollution in and around the squatter settlement. (e.g. questionnaires, interviews, take photographs, do experiments, collect information from internet, etc.)</p> <p><u>Level 2</u> (4 to 6 marks) More specific or developed statements which describe primary or secondary methods which could be used to investigate the problem of water pollution in and around the squatter settlement. (e.g. questionnaires/interviews asking people about the impacts of water pollution, take photographs to show sources of water pollution, collect samples of water and test acidity/chemical content, make observations of what happens to waste water used in homes, collect information from internet/read reports about levels of water borne disease in the area, test the water for presence of indicator species etc.)</p> <p><u>Level 3</u> (7 marks) A comprehensive answer which uses developed statements to clearly describe a variety of methods, both primary and secondary, which could be used to investigate the problem of water pollution in and around the squatter settlement.</p> <p>Note: Don't allow development for generic advantages of the methods. Must relate to the problem of water pollution in and around the squatter settlement.</p> <p>Reference to sampling methods = IR.</p>	7