

# Commentary on candidate evidence

The candidate evidence has achieved the following marks for each question of this course assessment component.

## Candidate 1

### Section 1: physical environments

Candidates respond to either Question 1 or Question 2. This candidate answered Question 1.

#### Question 1a

The candidate was awarded **3/3 marks** because they correctly matched all 3 glacial features to the correct grid reference.

#### Question 1b

The candidate was awarded **1/4 mark** for providing a basic explanation of the formation of a sand bar.

#### Question 3

The candidate was awarded **1/3 mark** because they correctly identified location A as the river. The responses to both B and C are incorrect.

#### Question 4

To gain marks here, responses require map evidence and explanations. In order for full marks to be awarded, candidates must refer to two land uses. The candidate was awarded the total of **5/5 marks** available as follows:

**Farming:** The first mark is awarded for the correct and relevant grid reference for farming; 430490 (1 mark). The second mark is awarded for 'flat making it easier to work machinery on' (1 mark). A further mark was awarded for 'soil will be rich and good for crops' (1 mark). No mark was awarded for the final sentence in this paragraph as the answer is too vague.

**Forestry:** A mark is awarded for 'the land is steep meaning theres not many other uses for it' (1 mark). A further mark is awarded for 'planting trees would be better as trees don't need rich soil to grow' (1 mark).  
Were it required, a final mark could have been awarded for 'trees are strong and can withstand the harsh weather conditions'.

### Question 5

The candidate referred to a relevant case study (Cairngorms) and can therefore, access the full marks available. The candidate was awarded **5/5 marks** as follows:

A mark was awarded for 'tourists...trampling over farmers crops' (1 mark). Another mark was awarded for the developed point of this causing farmers to lose money (1 mark). No marks were awarded for the solution given as this is not relevant to the question. Another mark is awarded for dogs scaring sheep, 'puts the sheep in danger' (1 mark). No marks were awarded for the solution given as it is not relevant to the question. A further mark was awarded for 'tourists leaving field gates open allowing animals to escape' (1 mark). Again, no marks were awarded for the solution given. Another mark was awarded for 'dropping litter...animals to digest the litter' (1 mark). Again, no marks were awarded for the solution given.

If required, a final mark could have been awarded for 'conflict is tourists say wind turbines are eyesores'.

### Question 6

The candidate was awarded **2/5 marks**.

A mark was awarded for 'only 5 knots of wind as the isobars are far apart' (1 mark). Another mark was awarded for the low temperature being explained by it being the middle of winter (1 mark). No marks were awarded for the final sentence as there is insufficient detail.

### Question 7

The candidate was awarded **1/5 mark**.

No marks were awarded for the first few sentences as there is insufficient detail given in the answer. However, a mark is awarded for the south of England being warmer as it's 'closer to the equator' (1 mark).

No marks were awarded for the final sentence as it is a repeat point.

## Section 2: human environments

### Question 8a

The candidate was awarded **3/5 marks**.

The first mark was awarded for area X being the inner city and area Y being the suburbs (1 mark). Another mark was awarded for the housing in area X being closer together than area Y (1 mark).

A final mark was awarded for area X having limited open space as opposed to area Y (1 mark).

**Question 8b**

The candidate was awarded **1/4 mark** for this question as they misread the question, answering for Derby, rather than the square indicated.

A mark is awarded for the main roads leading into the CBD (1 mark). No further marks were awarded as there are not 'lots of schools' or 'a couple of hospitals' in Duffield.

**Question 8c**

To access full marks for this question, answers should refer to both advantages and disadvantages. Candidates can also access a maximum of 1 mark for reference to activities in the surrounding area. The candidate was awarded **2/5 marks**.

The first mark was awarded for the area having 'plenty space for expansion' and the facilities planned (1 mark). Another mark is given for the 'slight hill...extra work to build on' making it more difficult and taking more time (1 mark). No marks were awarded for 'easy access' as there is insufficient explanation given.

**Question 9a**

To be able to access full marks, answers to this question should refer to both birth rates and death rates. The candidate was awarded **4/6 marks**.

The first mark was awarded for the 'significantly larger' base of the pyramid indicating less access to contraception in Nigeria (1 mark). Another mark is awarded for 'infant mortality rate is high so people will often have as many babies as possible' (1 mark). Another mark was awarded for Nigeria's life expectancy being lower as they have 'allot of diseases' (1 mark). A final mark was awarded for Austria having a more stable pyramid as there is a 'better education and healthcare system' (1 mark). No marks were awarded for the repeat point about disease.

**Question 9b**

The candidate misread the question and **0/4 marks** were awarded as the answer is confused.

**Question 10**

To achieve full marks in this question, candidates should correctly refer to both benefits and problems. The candidate was awarded **6/6 marks**.

The first mark was awarded for tractors making work 'faster and more efficient' (1 mark).

Another mark was awarded for new technology putting 'farmers into debt' (1 mark). Another mark was awarded for the extended point that debt may force farmers to take out a loan (1 mark). Another mark was awarded for 'causing people to loose their jobs' (1 mark). A mark is given for GM crops growing in adverse weather conditions so 'less yield would die (1 mark). No mark was

awarded for next sentence about GM crops helping with health as it is too vague. A further mark was awarded for them being 'expensive for farmers to purchase' (1 mark).

If required, a further mark could have been awarded for them possibly causing future 'long term health problems'.

### **Section 3: global issues**

In the 2023 question paper, candidates are required to answer ONE global Issues question. This candidate answered Question 16 – Health.

#### **Question 16a**

To achieve full marks, both the cases and number of deaths from malaria should be correctly described in detail. The candidate was awarded **3/4 marks**.

No marks were awarded for the first sentence as the candidate has misread the scale on the graph.

The first mark was awarded for correctly reading that in the year 2000, there were 241 million cases (1 mark) however, the deaths statistic is incorrect due to misreading the scale. Another mark was awarded for the next sentence 'in 2010 ...244 million cases' (1 mark) however no further marks were awarded here as, again, the deaths figure was incorrectly read.

A final mark is awarded for '241 million cases' in 2020 (1 mark), but again, the deaths figure was incorrectly read, and so no further marks were awarded.

No marks were awarded for the final sentence as again, the candidate misread the scale on the graph.

#### **Question 16b**

No marks were awarded as there is insufficient explanation as to the ways in which the candidate's suggestions would control heart disease (**0/6 marks**).

**Total marks awarded: 37/70**

## Candidate 2

### Section 1: physical environments

Candidates respond to either Question 1 or Question 2. This candidate answered Question 2.

#### Question 2a

The candidate was awarded **3/3 marks** because they correctly matched all 3 river features to the correct grid reference.

#### Question 2b

The candidate was awarded **3/4 marks**.

The first mark was awarded for 'glaciers scraped the topsoil off of the limestone, exposing it to weathering' (1 mark). A second mark was awarded for noting that the acidic rainwater dissolves the limestone (1 mark). The start of the third bullet point does not gain any marks as it is too far back in time however, a third mark is awarded for the chemical weathering developing the clints and grikes over time (1 mark).

#### Question 3

The candidate was awarded **3/3 marks** because they correctly identified the 3 features on the cross-section.

#### Question 4

To gain marks in this question, responses require map evidence and explanations. Also, for full marks, candidates must refer to two land uses. The candidate was awarded **4/5 marks**.

**Recreation and tourism:** The first bullet point was not awarded a mark as 'places' is too vague and the grid reference is incorrect. No marks were awarded for the second bullet point as there needs to be further clarification as to why the people might want to visit the town. The first mark is awarded for the walking trail that 'walkers may be interested in' (1 mark), and a second mark was awarded for the correct and relevant grid reference (1 mark).

**Farming:** No marks were awarded for the cattle farming point because the candidate has not explained why the area is suitable for this land use, eg more fertile soil or good for machinery. A third mark is awarded for the explanation of sheep farming on the steep land being possible due to the sheep being 'sure-footed' (1 mark). A fourth mark is awarded for the explanation of the arable farming with its 'flat' land and 'low flood-risk' (1 mark).

#### Question 5

The candidate referred to a relevant case study (Glasgow) and can therefore, access full marks. The candidate was awarded **4/5 marks**.

No marks are awarded for the first bullet point because the candidate has not explained why leaving the gates open would annoy the farmers, ie allowing animals to escape.

The first mark is awarded in the second bullet point where the conflict between tourists and farmers are explained – ‘illegally closing footpaths’ (1 mark). A second mark is awarded for the tourists’ ‘dogs can attack and scare the sheep’ (1 mark). A third mark is awarded for conflict between different types of tourists being exemplified with fisherman and white-water rafters annoying each other (1 mark). The fourth mark is awarded for the conflict between water storage and supply and farmers who ‘may spray chemicals into the water which can be expensive to clean up’ (1 mark).

### Question 6

The candidate was awarded **0/5 marks** for this response as the points are only description, not explanation.

### Question 7

The candidate was awarded **5/5 marks**.

The first mark was awarded for the recognition that ‘the higher up a mountain you go, the colder it gets’ (1 mark). No mark was awarded for the developed point of the temperature as the candidate has said ‘1km’ instead of 100 metres. The second mark was awarded for the idea of an urban heat island (1 mark). The third mark was awarded for the correct explanation of the effect of the sea on temperatures (1 mark). A fourth mark was awarded for the effect that latitude and distance from the Equator have on temperature (1 mark). A fifth and final mark was awarded for aspect and north facing areas being colder (1 mark).

If it were required, a further mark could have been awarded for Albedo effect on temperatures.

## Section 2: human environments

### Question 8a

The candidate was awarded **2/5 marks**.

The first mark was awarded for identifying that area X is the inner city and compared it to Area Y, which is the suburbs (1 mark). A second mark was awarded for comparing the street patterns; grid-iron in area X and cul-de-sacs in area Y (1 mark). No marks were awarded for the third bullet point because the churches alone do not give a difference in age between the two areas.

No further marks were awarded for this response as the points are not relevant to the question.

**Question 8b**

The candidate was awarded **4/4 marks**.

The first mark was awarded for the 'lower pollution' in Duffield making it more popular than the CBD (1 mark). The second mark was awarded for 'easy access to the CBD via a train line' (1 mark). The third mark was awarded for the example of activities the family can do, eg 'trails' (1 mark). A fourth mark was awarded for the housing area with curved roads being linked to improved safety for children (1 mark). No marks were awarded for the nature reserve as this point is a repeat of activities.

**Question 8c**

For full marks, answers should refer to both advantages and disadvantages. Also, candidates can access a maximum of 1 mark for reference to activities in the surrounding area. The candidate was awarded **5/5 marks**.

No mark is awarded for the first bullet point about there being access via main roads because the candidate does not explain why the hotel customers would go into the CBD, ie for shopping or entertainment. The first mark was awarded for the nature reserve as an example of an activity in the surrounding area (1 mark). No mark was awarded at 'footpath' as this is a repeat of an activity the hotel guests could do. A second mark was awarded for the disadvantage that forestry requires to be cut down to build the hotel (1 mark). A further mark was awarded for the development that cutting down forestry is 'expensive and bad for the environment' (1 mark). A fourth mark was awarded for the identification of a water tower being in the way of the development and needing to be removed (1 mark). The fifth mark was awarded for the fact that the golf course owners would not be happy with their land being taken up by the hotel development (1 mark).

If it were required, a further mark could have been awarded for the flood risk posed by the lake.

**Question 9a**

For full marks, answers to this question should refer to both birth rates and death rates. The candidate was awarded **6/6 marks**.

The first mark was awarded for the explanation that high infant mortality rate in Nigeria means they 'have more kids' than Austria to ensure some survive (1 mark). A second mark was awarded for the identified difference in medical care between the two countries resulting in longer life expectancy in Austria (1 mark). A third mark was awarded for the differences in the death rate between the two countries, explained by 'sanitation and less access to clean water' (1 mark). A fourth mark was awarded for the explanation of Nigeria's higher percentage of children resulting from the need to 'provide an income for the family' (1 mark). A fifth mark was awarded for 'less people live to above the age of 75 in Nigeria due to the lack of care homes and elderly support' (1 mark). A final mark was awarded for the explanation of the different birth rates between the two countries resulting from the 'lack of family planning and birth control' (1 mark).

### Question 9b

The candidate was awarded **3/4 marks**.

The first mark was awarded for the explanation that 'improvements in medical technology...allowing cures for diseases to be found' and therefore lowered death rates (1 mark). No marks were awarded for the second bullet point because more detail and explanation is required. A second mark was awarded for the explanation that 'cleaner water supplies, allow people to be healthier' and therefore reduces death rates (1 mark). A third mark was awarded for 'improvements in areas such as sewage and sanitation' provision in the developing world resulting in falling death rates (1 mark). No further marks were awarded in the final bullet point because it is a repeat of medical advances improving death rates.

### Question 10

To access full marks in this question, candidates should correctly refer to both benefits and problems. The candidate was awarded **6/6 mark**.

The first mark was awarded for the explanation that GM crops 'can be modified to withstand droughts reducing overall famine' (1 mark). The second mark was given for the developed point explains how these crops can be modified to contain vitamins (1 mark). The third mark was awarded for the explanation that GM crops can create a "superweed" (1 mark). A fourth mark was awarded for the explanation that new technology is faster and more efficient (1 mark). A fifth mark was awarded for the explanation that machinery replaces workers' jobs (1 mark). The final mark was awarded for the explanation that the workers' unemployment results in them moving into shanty towns (1 mark).

If required, further marks could have been awarded for; explaining that exposure to fertilisers without PPE can potentially affect the farmers' health, identifying that the biofuels can be sold overseas for large profits, explaining that growing biofuels has replaced 'regular farming' which results in less crops and therefore famine and for explaining how the overuse of water/irrigation can lead to drought.

## Section 3: global issues

In the 2023 question paper, candidates are required to answer ONE global Issues question. This candidate answered Question 13 – Environmental hazards.

The first mark was awarded for 'earthquake increases from 285 to 435 between the years 1910 and 1940' (1 mark). The second mark was awarded for 'between the years 1950 and 1960 there was a decrease in the number of earthquakes from 425 to 360' (1 mark). No marks were awarded for the third bullet point because no change is identified. The third mark was awarded for 'spike in the number of earthquakes from 360 to 435 between the years 1980 and 1990 (1



mark). The fourth mark was awarded for identifying the overall trend from the graph 'the number of earthquakes has increased' (1 mark).

### **Question 13b**

The candidate referred to a named volcanic eruption (Mt St Helens) and can therefore access the full marks available. The candidate was awarded **6/6 marks**.

The first mark was awarded for the eruption causing 61 deaths (1 mark). The second mark was awarded for the ash having 'caused road blockages and wrecked machinery' (1 mark). The third mark was awarded for the scale of the eruption lowering the height of the mountain (1 mark). A further mark was awarded for the explanation of the force of the blast flattening trees (1 mark). A further mark was awarded for the explanation of the force killing animals that lived in the surrounding forest (1 mark). A further mark was awarded for 'the lahar that fell...displaced all the water in Spirit Lake, causing flooding' (1 mark).

If it were required, a final mark could have been awarded for the lahar destroying the salmon hatcheries.

**Total marks awarded: 58/70**

## Candidate 3

### Section 1: physical environments

Candidates respond to either Question 1 or Question 2. This candidate answered Question 1.

#### Question 1a

The candidate was awarded **3/3 marks** because they correctly matched all 3 glacial features to the correct grid reference.

#### Question 1b

The candidate was awarded **4/4 marks**.

The first mark was awarded for explanation of the processes in the diagram; it shows the first position of the pebble, then the swash and backwash (1 mark). The second mark was awarded for the description of the process of longshore drift (1 mark). The third mark was awarded for noting the change in the direction of the coastline (1 mark). The fourth mark was awarded for the description of the deposits of sand building up above sea level (1 mark).

If required, further marks could have been awarded for; 'the material will then extend out to sea to form a sand spit' and for 'if this material reaches the other side of the break/change it becomes a sand bar'. No marks were awarded for 'marsh'.

#### Question 3

The candidate was awarded **3/3 marks** because they correctly identified the 3 features on the cross-section.

#### Question 4

To gain marks, responses to this question require map evidence and explanations. Also, to access full marks, candidates must refer to two land uses. The candidate was awarded **5/5 marks**.

**Tourism:** The first mark was awarded for the identification of places to stay for the tourists; 'campsite and caravan park' (1 mark), and a second mark was awarded for the correct and relevant grid reference at 490450 (1 mark). The third mark was awarded for the road access given by the A855 (1 mark). The fourth mark was awarded for the identified area of forestry where the tourist could go orienteering (1 mark).

The candidate has now reached the maximum number of marks available for one land use. However, if it were required, the identification of Loch Leathan providing opportunities for water sports and fishing could have achieved a further mark. Another potential mark could also have been awarded for identifying an area where tourists could rock climb and abseil.

**Renewable energy:** The fifth mark is awarded for identifying an area of high ground which 'will be very windy so they can generate lots of energy' (1 mark). No marks were awarded for the repeat point of road and access.

If it were required, a final mark could have been awarded for identifying that the potential turbines would be 'far away from any towns or villages so it won't disturb the locals'.

### Question 5

The candidate referred to a relevant case study (Cairngorms) and can therefore, access the full marks available. The candidate was awarded **5/5 marks**.

The first mark was awarded for the description of the damage tourists cause to farmer's walls (1 mark). A second mark was awarded for developing this point and explaining that this damage will take the farmer time to fix (1 mark). The third mark was awarded for 'tourists let their dogs off leads and the dogs can scare the pregnant sheep causing a miscarriage' (1 mark). The fourth mark is awarded for the loss of sheep meaning 'the farmer loses money' (1 mark). The fifth mark is awarded for 'tourists leave farm gates open and animals can escape' (1 mark).

If required, a further mark could have been awarded for 'farmers need to search for them' No marks could be awarded for the vet bills as this is a repeat of impact on farmer's income. A further mark could be awarded for the idea of the animals potentially choking on the tourists' litter, but again no marks could be awarded for the repeat of loss of income/vet bills. No marks could be awarded for the shooting of dogs as this is a solution.

Further marks could have been awarded for tourists causing footpath erosion; 'scarring the scenery', the farmers restricting tourists' access 'which annoys them' and for 'Tourist can also trample on farmers crops and destroy them'. No marks could be awarded for the last point about money as again, it's a repeat of loss to the farmer's income.

### Question 6

The candidate was awarded **2/5 marks**.

The first mark was awarded for the candidate explaining that the very far apart isobars result in calm winds (1 mark). No marks were awarded for the explanation of the cold '-4°' because the candidate has not explained that it's resulting from high pressure in winter, they've simply written 'high pressure'. The second mark was awarded for explaining that the westerly winds are a result of the wind blowing clockwise in a high pressure system (1 mark).

### Question 7

The candidate was awarded **5/5 marks**.

The first mark was awarded for the explanation that places 'high above sea levels are colder' (1 mark). The second mark was awarded for the exemplification that 'For every 100m you go up the temperature drops by 1°' (1 mark). A third mark was awarded for explaining that the south of the UK is warmer than the north because it is 'closer to the equator' (1 mark). A fourth mark was awarded for explaining that 'the sun's rays are much more concentrated' at the Equator (1 mark). There are no marks awarded for the effect of the snow and the rate of reflection affecting 'heat' because more exemplification is required. A fifth mark was awarded for the explanation of aspect and the south facing slopes being warmer (1 mark).

If it were required, a further mark could have been awarded for the idea of the 'urban heat island'.

## Section 2: human environments

### Question 8a

The candidate was awarded **4/5 marks**.

The first mark was awarded for the description of the difference of the inner city in area X with suburbs in area Y (1 mark). A second mark was awarded for comparing the road layouts of the two areas 'Area X has a grid iron street pattern while area Y has crescents and cul-de-sacs' (1 mark). A third mark was awarded for comparing the amount of open space in both areas (1 mark), and a fourth mark was awarded for identifying the difference in age of the environments 'more old churches' (1 mark). No marks were awarded for the 'cheaper' land as more explanation and comparison is required. No marks were awarded for 'greenery' as this is a repeat of the mark previously awarded for 'open space'. No marks were awarded for 'closer to the CBD' as more exemplification is needed. No marks were awarded for the last sentence about the difference in the roads as the candidate has not linked it to the urban environment by discussing pollution, noise etc.

### Question 8b

The candidate was awarded **4/4 marks**.

No marks were awarded for the first sentence as no explanation of the 'cheap' land has been given. The first mark was awarded for the main road (A61) providing access to the CBD (1 mark). The second mark was awarded for the activity that the family could participate in if they lived there; 'There is a nature reserve...for families to go visit' (1 mark). The third mark was awarded for the train station providing 'more access to the CBD' (1 mark). The fourth mark was awarded for the school 'where parents can send their children' (1 mark). No further marks were awarded as both the walking trail and the park are further examples of activities the family could do.

**Question 8c**

In order to access full marks, answers to this question should refer to both advantages and disadvantages. Also, candidates can access a maximum of 1 mark for reference to activities in the surrounding area. The candidate was awarded **5/5 marks**.

The first mark was awarded for the availability of workers due to the hotel being at the edge of Derby (1 mark). The second mark was awarded for the description of the available access from the main road (1 mark). The third mark was awarded for 'room to expand', which is justified by saying that the space is 'to the south' (1 mark). A fourth mark was awarded for identifying the lake as a flood risk, which could 'damage the hotel' development (1 mark). The fifth mark was awarded for identifying the trees which 'you would have to cut down' to build the hotel (1 mark).

If it were required, further marks could have been awarded for the developed point of the animal habitats/greenbelt being destroyed, the golf course providing a leisure activity for the tourists visiting the hotel and for the land not being completely flat, making it more difficult to build on.

**Question 9a**

In order to access the full marks, answers to this question should refer to both birth rates and death rates. The candidate was awarded **6/6 marks**.

The first mark was awarded for explaining that a lack of contraception in Nigeria leads to higher birth rate (1 mark). The second mark was awarded for identifying that in Nigeria children are an 'economic asset' (1 mark). A third mark was awarded for explaining that there are more children in Nigeria to 'take care of their parents when they are older' (1 mark). A fourth mark was awarded for the explanation of Austria's pyramid being 'narrower' at the base and 'women who want to focus more on their careers' (1 mark). A fifth mark was awarded for explaining Austria's low birth rate being due to a more 'materialistic' lifestyle (1 mark). A sixth mark was awarded for explaining that Nigeria's apex is narrower...lack of sanitation' (1 mark).

If required, a further mark could have been awarded for the lack of clean water in Nigeria. No marks could be awarded for 'overcrowding' because this is a repeat point. If needed, further marks could also have been awarded for explaining Austria's wider apex as being a result of 'better healthcare and hospitals', and for explaining that the better food supply for Austria lowers death rates.

**Question 9b**

The candidate was awarded **4/4 marks**.

The first mark was awarded for 'Better food supply means people are stronger and healthier' therefore lowering death rates (1 mark). The second mark was awarded for 'Better sanitation such as toilets' (1 mark). The third mark was awarded for reduced deaths due to 'Better access to clean drinking water' (1 mark). The fourth mark was awarded for the 'improved healthcare' reducing deaths (1 mark).

Were it needed, further marks could have been awarded for 'vaccinations' and for the 'New medical discoveries...that can help illnesses'.

**Question 10**

To access full marks in this question, candidates should correctly refer to both benefits and problems. The candidate was awarded **6/6 marks**.

The first mark was awarded for 'machinery is more efficient' (1 mark). The second mark was awarded for 'farmer saves money on wages' (1 mark). No marks were awarded for 'harvested quicker' because this is a repeat point of efficiency. The third mark was awarded for the crops 'get to the market quicker and are fresher' as a result of the machinery (1 mark). A fourth mark was awarded for the explanation of how the extra money being made by the farmer could improve their standard of living ie being able to 'send their kids to school' (1 mark). A fifth mark was awarded for explaining that machinery replaces workers' jobs (1 mark). A sixth mark was awarded for the developed point that this then causes people then move to shanty towns in the city as they have no job (1 mark).

If required, a further mark could have been awarded for machinery causing 'air and noise pollution'. No marks could be awarded for the points about hedges and top soil as they relate more to farming in developed countries however, a further seven marks could have been awarded for the following points: 'bigger yield' from GM crops, 'more food for farmers families', a surplus to sell to 'earn more money', GM crops being more 'resistant', GM crops providing 'added nutritional benefits', 'poorer farmers... could go into debt' and 'farmers have committed suicide'.

**Section 3: global issues**

In the 2023 question paper, candidates are required to answer ONE global Issues question. This candidate answered Question 11 – Climate Change.

**Question 11a**

The candidate was awarded **4/4 marks**.

The first mark was awarded for the first sentence giving a general trend; 'atmospheric CO2 is increasing greatly' (1 mark). The second mark was awarded

for the change in atmospheric CO<sub>2</sub> from 1990 to 2020 from '295...415 parts per million' (1 mark). A third mark was awarded for the change in CO<sub>2</sub> emissions from 1900 to 2020 from 2.5 to 35 gigatons' (1 mark). The fourth mark was awarded for the calculation of the difference between these 2 years; '32.5 gigatons' (1 mark).

If it were required, a further mark could have been awarded for the difference of '15 Gigatons in CO<sub>2</sub> emissions' from 1950-1980. No further marks could be awarded as a trend mark had already been awarded.

### **Question 11b**

The candidate was awarded **6/6 marks**.

No marks were awarded for the first sentence because it is too vague. The first mark was awarded for the explanation that planting trees reduces CO<sub>2</sub> in the atmosphere (1 mark). A second mark was awarded for 'less methane' being produced if less rubbish goes to dumps (1 mark). A third mark was awarded for 'less greenhouse gases' being produced by electric cars (1 mark). A fourth mark was awarded for a reduction in fossil fuels being burned if you 'switch off appliances' (1 mark). A fifth mark was awarded for less carbon dioxide production if there are 'less cars on the road' due to car sharing (1 mark). The sixth mark was awarded for reducing greenhouse gases by 'using renewable energy' sources (1 mark).

**Total marks awarded: 66/70**

## Candidate 4

### Section 1: physical environments

Candidates respond to either Question 1 or Question 2. This candidate answered Question 2.

#### Question 2a

The candidate was awarded **3/3 marks** because they correctly matched all 3 river features to the correct grid reference.

#### Question 2b

The candidate was awarded **4/4 marks**.

The first mark was awarded for the diagrams which show the formation of a limestone pavement over time (1 mark). A second mark was awarded for 'permeable because water can seep through' (1 mark). A further mark was awarded for 'During glaciation, the topsoil was scraped away' exposing it (1 mark). The fourth mark was awarded for 'Rainwater....dissolves the limestone in the process of carbonation' (1 mark).

If it were required, a final mark could have been awarded for 'rectangular blocks of limestone...separated by gaps, grikes'.

#### Question 3

The candidate was awarded **3/3 marks** because they correctly identified the 3 features on the cross-section.

#### Question 4

To gain marks for this question, responses require map evidence and explanations. Also, for full marks, candidates must refer to two land uses. The candidate was awarded **5/5 marks**.

**Tourism:** The first mark was awarded for a correct grid reference; '490450' (1 mark). A second mark was awarded for the 'campsite...can stay overnight' (1 mark). A third mark was awarded for the 'heritage centre' for history (1 mark). A further mark was awarded for hills to climb 'for the view' (1 mark).

**Forestry:** No marks were awarded for 'suitable for forestry' because the candidate does not explain why its suitable. A final mark was awarded for roads, eg A850, 'transporting chopped trees' (1 mark).

#### Question 5

The candidate referred to a relevant case study (The Yorkshire Dales) and can therefore access full marks. The candidate was awarded **5/5 marks**.



The first mark was awarded for 'dogs off the lead...cause a miscarriage in lambing season' (1 mark). A further mark was awarded for 'gates open...allows farm animals to escape' (1 mark). Another mark was awarded for the developed point of loss of farmers income (1 mark) and a further mark was awarded for 'Tourists also climb over stone walls...which damages them (1 mark). No marks were awarded for 'expensive to repair' as this is a repeat point of loss of income however, a further mark was awarded for the conflict with tourists and 'loud blasts from quarries disrupt the peaceful, quiet area' (1 mark).

If it were required, a further mark could have been awarded for quarries being 'an eyesore and spoil the natural beauty and views of the landscape' for tourists.

### Question 6

The candidate was awarded **5/5 marks**.

The first mark was awarded for 'no precipitation' as air is not rising to form clouds (1 mark). The second mark was awarded for 'it is cold because there are no clouds to trap the heat in' (1 mark). A further mark was awarded for 'anticyclone in winter' explaining the cold temperature (1 mark) and a further mark was awarded for '5 knots as the isobars are spaced far apart' (1 mark). The final mark was awarded for 'winds spiral clockwise in an anticyclone' to explain the westerly wind (1 mark).

If it were required, further marks could have been awarded for fog being 'common weather in winter anticyclones' explaining the obscured sky, and for weather being 'settled' as there is an anticyclone.

### Question 7

The candidate was awarded **5/5 marks**.

The first mark was awarded for 'the south of the UK is warmer because it is closer to the equator' (1 mark). The second mark was awarded for 'the sun's rays have less heat to travel through so less heat is lost' (1 mark). The third mark was awarded for 'rays shine on a smaller, more concentrated area...so is hotter' (1 mark). The fourth mark was awarded for 'the higher up the land is from sea level, the colder it is' (1 mark). The final mark was awarded for 'Temperature decreases by 1°C for every 100m' (1 mark).

Had they been required, further marks could have been awarded for further explanation of air becoming 'less dense so holds less heat', 'warm ocean current called the North Atlantic Drift' affecting temperatures, 'prevailing wind...brings warmth' and for 'sea takes longer to heat up and cool down than land does, so coastal areas of the UK tend to be warmer'.

## Section 2: human environments

### Question 8a

The candidate was awarded **5/5 marks**.

The first mark was awarded for identifying area X as the inner city, and area Y as the suburbs (1 mark). A second mark was awarded for identifying the grid iron street pattern in area X, and the cul-de-sac street pattern in area Y (1 mark). A third mark was awarded for 'there is more space and land values will be cheaper' in area Y (1 mark). The fourth mark was awarded for area X being in the older part of the city due to churches, and Y being built more recently so it is more modern (1 mark). The final mark was awarded for area X having main roads, and area Y having minor roads for local access (1 mark).

If it were required, a further mark could have been awarded for area X being 'high density' with less open space and area Y being 'low density' and more open space.

### Question 8b

The candidate was awarded **4/4 marks**.

The first mark was awarded for 'affordable housing' as it is on the outskirts where land values are cheaper (1 mark). The second mark was awarded for noting that the main road to the city means it would be easy to commute (1 mark). The third mark was awarded for noting the school for children in the area (1 mark) and the final mark was awarded for 'less crowded place to live unlike the busy and noisy CBD' (1 mark).

### Question 8c

To access full marks, answers to this question should refer to both advantages and disadvantages. Also, candidates can access a maximum of 1 mark for reference to activities in the surrounding area. The candidate was awarded **5/5 marks**.

The first mark was awarded for the potential customers close by from visitors to the CBD (1 mark). The second mark was awarded for noting the availability of workforce from the nearby town (1 mark). The third mark was awarded for 'forestry...need to be cleared' (1 mark). The fourth mark was awarded for the developed point that clearing the forest would be expensive (1 mark). The final mark was awarded for the impact on wildlife in the nature reserve (1 mark).

If they were required, further marks could have been awarded for the land not being 'entirely flat' so it will be difficult to build on, and for the golf course potentially being 'unhappy...spoiling the views for golfers' by the development.

**Question 9a**

To access full marks, answers to this question should refer to both birth rates and death rates. The candidate was awarded **4/6 marks**.

No marks were awarded for the first 8 lines of the response because there is not yet a comparison between the two countries. The first mark was awarded for 'women have lots of children to ensure some survive to adulthood' as the candidate is now describing and explaining Nigeria's population structure, so a comparison can be made with Austria (1 mark). The second mark was awarded for children being an 'economic asset' in Nigeria (1 mark). A third mark was awarded for explaining that children 'look after parents in their old age' in Nigeria (1 mark) and the fourth mark was awarded for noting that improved healthcare 'extends people's lives' in Austria as there is a comparison to Nigeria (1 mark).

**Question 9b**

The candidate was awarded **4/4 marks**.

The first mark was awarded for 'Death rates are falling due to better healthcare' (1 mark). The second mark was awarded for 'medications and treatments which save lives' (1 mark). The third mark was awarded for 'access to clean water sources which prevents deaths from water borne diseases' (1 mark). The final mark was awarded for 'babies are vaccinated at birth...more likely to survive' (1 mark).

Had they been required, further marks could have been awarded for improved maternal care meaning lower infant mortality rates, and for less labour intensive jobs due to mechanisation meaning 'decreased death rates' from strain on the body.

**Question 10**

To access full marks, candidates should correctly refer to both benefits and problems. The candidate was awarded **6/6 marks**.

The first mark was awarded for machinery making work faster and more efficient (1 mark). The second mark was awarded for 'less labour intensive' work improving standard of living (1 mark). The third mark was awarded for 'fewer jobs' due to mechanisation (1 mark). The fourth mark was awarded for the developed point 'This leads to rural depopulation' (1 mark) and the fifth mark was awarded for the description of GM crops ensuring 'food security' (1 mark). The final mark was awarded for only 'richer farmers' being able to afford GM so there is inequality (1 mark).

Had they been required, further marks could have been awarded for 'Bio-fuels are a cheaper alternative to fossil fuel', biofuels being 'less harmful' to the environment, food shortages caused by land being used for biofuels and for food price increases due to land being used for biofuels.

### Section 3: global issues

In the 2023 question paper, candidates are required to answer ONE global Issues question. This candidate answered Question 15 – Tourism.

#### Question 15a

The candidate was awarded **4/4 marks**.

The first mark was awarded for correctly identifying that the 'UK ... and Italy had between 10-50 million tourist arrivals in 2020' (1 mark). No mark was awarded for 'Spain' as this is incorrect. No mark was awarded for 'The USA and Canada' as this is a repeat for 10-50 million category. A second mark was awarded for 'Mexico had over 50 million' (1 mark) and a third mark was awarded for 'In South America, the majority of countries had between 1-10 million' (1 mark). No mark was awarded for 'Russia' as this is a repeat of the 1-10 million category. The final mark was awarded for the continent with fewest tourist arrivals being 'Africa as most countries had less than 1 million' (1 mark).

#### Question 15b

The candidate was awarded **6/6 marks**.

The first mark was awarded for people 'get paid holiday time off work so they can afford to travel abroad' (1 mark). The second mark was awarded for people having higher incomes and can therefore afford holidays (1 mark). The third mark was awarded for more 'budget airlines' making flying more affordable (1 mark). The fourth mark was awarded for travel companies offering package holidays making it easy to book (1 mark). The fifth mark was awarded for people wanting to take part in activities abroad 'for example, skiing' (1 mark), and the final mark was awarded for social media and travel tv programmes inspiring people to visit new places (1 mark).

**Total marks awarded: 68/70**