

Commentary on candidate 1 evidence

Question 1 – map interpretation

(a) Discuss the physical factors that may have influenced the site of Rye (6marks)

The candidate was awarded **4 marks**, 1 for each of the following:

- 2nd paragraph – the meeting point of named rivers/bridge/traders/ 6 figure grid references
- 3rd paragraph - high land/less exposed/6 figure grid references
- 4th paragraph – traditional harbour/marsh development problem/6 figure grid reference
- Last paragraph – early trading links/waterway system/6 figure grid references

b(i) Draw accurately to scale a suitable site for the Park & Ride (3 marks)

The candidate was awarded **2 marks** for the following:

- 1 mark for drawing to scale
- 1 mark for choice of site (not adjacent to A class road)

b(ii) Explain the reasons for your choice of site (5 marks)

The candidate was awarded **5 marks**, 1 for each of the following:

- 1st paragraph – A29/M20 with correct map annotation/Kent (reference to information in text box). This then leads into the next point.....
- 1st paragraph – reduction of town congestion ‘as most cars won’t have to travel through the town’
- 3rd paragraph – existing infrastructure, with exemplification/6 figure grid references. Point is further developed
- 4th paragraph – open space/ability to expand. Point is further developed
- Last paragraph – Camber Road access. Point is further developed in detail.

c(i) Suggest possible reasons for the designation of Rye Harbour as a Nature Reserve (3 marks)

The candidate was awarded **1 mark** for the information in the first paragraph regarding *quiet and secluded/ animals ‘unlikely to be disturbed’*

c(ii) Discuss potential problems that could arise at Rye Nature Reserve due to its location (3 marks)

The candidate was awarded **2 marks**, 1 for each of the following:

- 1st paragraph - coastal path/cycle route/disturbance/endanger species
- Last paragraph – disturbance from boats /'potential for oil pollution.....ecosystem'.

Total marks awarded 14/20

Commentary on candidate 2 evidence

Question 1 – map interpretation

Discuss the physical factors that may have influenced the site of Rye (6marks)

The candidate was awarded **6 marks** as follows:

- 1st paragraph - nodal point of correctly named rivers/good defence
- 2nd paragraph - river transport/trade
- 3rd paragraph – bridging of narrow point of Brede/access/6 figure grid references
- 4th paragraph – flat land/arable farming/fertile soil/river floodplain
- 6th paragraph – High ground/defence/flood risk reduced/shelter from nearby hills/6 figure grid reference (2 marks)

b(i) Draw accurately to scale a suitable site for the Park & Ride (3 marks)

The candidate was awarded **3 marks** as follows:

- 1 mark for drawing to scale
- 2 marks for appropriate choice of site

b(ii) Explain the reasons for your choice of site (5 marks)

The candidate was awarded **3 marks**, 1 for each of the following:

- 1st paragraph – access from Kent/reducing length of journey
- 2nd paragraph – ease congestion in Rye/parking issues on narrow roads (use of information in text box)
- 3rd paragraph – reference to low flood risk/irrigation channels/ease of access for construction

c(i) Suggest possible reasons for the designation of Rye Harbour as a Nature Reserve (3 marks)

The candidate was awarded **2 marks**, 1 for each of the following:

- Reference to pools of water/habitats for aquatic & semi aquatic species
- Holistic mark by combining 'preserving the scenery' and sand dune protection

c(ii) Discuss potential problems that could arise at Rye Nature Reserve due to its location (3 marks)

The candidate was awarded **2 marks**, 1 for each of the following:

- 1st paragraph – access to Winchelsea Beach/footpath erosion/damage to sand dunes & plants
- 3rd paragraph – storms/flooding

Total marks awarded 16/20

Commentary on candidate 3 evidence

Question 2 – Gathering and processing techniques

(a) Outline the physical & human techniques that could be used to assess the impact that visitors may be having on the environment of the Nature Reserve (4 marks)

The candidate was awarded **3 marks**, 1 for each of the following:

- 1st paragraph - EQS along footpaths/selected transects/pollution & litter
- 2nd paragraph - footfall survey along footpaths/direction
- 3rd paragraph – vegetation analysis/quadrat/trampled plants & exposed soil

b(i) Discuss an appropriate sampling method (2 marks)

The candidate was awarded **1 mark** for the information on systematic sampling/across whole transect/ no section missed out

b(ii) Explain factors, other than micro-climate, that may account for changes in vegetation across the Nature Reserve (4 marks)

The candidate was awarded **2 marks**, 1 for each of the following:

- 1st paragraph – salt water from Rye Bay/infiltration/soil pH
- 3rd paragraph – soil moisture/boggy ground

Total marks awarded 6/10

Commentary on candidate 4 evidence

Question 2 – Gathering and processing techniques

(a) Outline the physical & human techniques that could be used to assess the impact that visitors may be having on the environment of the Nature Reserve (4 marks)

The candidate was awarded **4 marks**, 1 for each of the following:

- 1st paragraph - questionnaires & interviews/exemplification
- 2nd paragraph - Ph probes/soil acidity differences relating to distance from footpath
- 3rd paragraph – Pedestrian counts ‘at several points along the path’/further development of point
- Holistic final mark which incorporated reference to decibel meter/noise pollution; quadrats/vegetation cover/point counts of bird species

b(i) Discuss an appropriate sampling method (2 marks)

The candidate was awarded **2 marks** for good, detailed knowledge and understanding of stratified sampling

b(ii) Explain factors, other than micro-climate, that may account for changes in vegetation across the Nature Reserve (4 marks)

The candidate was awarded **4 marks**, 1 for each of the following:

- 1st paragraph – grazing species & herbivores/developed
- 2nd paragraph – soil acidity/exemplification/developed
- 3rd paragraph – pools of water/marsh plants/aquatic species
- Last paragraph – human activity/seeds from gardens

Total marks awarded 10/10

Commentary on candidate 5 evidence

Question 3 – Data handling

a(i) Explain the factors that could account for the pattern of city population shown on the map (4 marks)

The candidate was awarded **2 marks**, 1 for each of the following:

- 1st paragraph - Netherlands coast/importing & exporting/industries & businesses
- 1st paragraph - capital cities with examples/resources

a(ii) Evaluate the effectiveness of using proportional circles to show this information (3 marks)

The candidate was awarded **3 marks**, 1 for each of the following:

- Good, visual representation/comparison
- Identify patterns/areas of high/low value
- Crowding of values/exemplification

b(i) State a null hypothesis (1 mark)

The candidate was awarded **1 mark** because their answer was correct.

b(ii) Evaluate this result in terms of the null hypothesis (2 marks)

The candidate was awarded **2 marks** because their answer was correct.

b(iii) Explain the suitability of using Spearman's Rank Correlation Coefficient for measuring the relationship (4 marks)

The candidate was awarded 4 marks for the following:

- Outliers/skewed or non-parametric data with exemplification (2 marks)

- Ordinal/ranked data
- Comparison with other data sets/exemplification

(c) Discuss possible reasons for the population changes shown in the Table (6 marks)

The candidate was awarded 3 marks, 1 for each of the following:

- Norway/high GDP/jobs available
- Germany/DR v BR
- Bulgaria/emigration in search of better paid jobs

Total marks awarded 15/20

Commentary on candidate 6 evidence

Question 3 – Data handling

a(i) Explain the factors that could account for the pattern of city population shown on the map (4 marks)

The candidate was awarded **2 marks**, 1 for each of the following:

- 1st paragraph - capital cities with examples/ 'heart of the country's economic activity'/business opportunities
- Switzerland/remoteness/ communication difficulties

a(ii) Evaluate the effectiveness of using proportional circles to show this information (3 marks)

The candidate was awarded **2 marks** for the following:

- 'maintain the raw data'/'spatial differences can be calculated' (needs to be developed/clarified)
- 'obscure the underlying map.....difficult to read'
- 'can be time consuming to gain accurate reading & therefore determine a population's size'

b(i) State a null hypothesis (1 mark)

The candidate was awarded **1 mark** because their answer was correct.

b(ii) Evaluate this result in terms of the null hypothesis (2 marks)

The candidate was awarded **1 mark** for 'accept the hypothesisreject the hypothesis?'

b(iii) Explain the suitability of using Spearman's Rank Correlation Coefficient for measuring the relationship (4 marks)

The candidate was awarded **2 marks**, 1 for each of the following:

- numerate data/ranked

- less time consuming/Pearson's

(c) Discuss possible reasons for the population changes shown in the Table (6 marks)

The candidate was awarded **5 marks**, 1 for each of the following:

- Norway/high cost of living - transport
- Italy/ageing population (relevant use of atlas)/high net migration
- Bulgaria/emigration in search of better paid jobs – link back to ageing population with exemplification
- Portugal/low tourist arrival rate/job decrease
- Spain/retirement/low GDP/climate

There was a good attempt at 'joined up thinking' from candidate in relation to the data given/use of atlas.

Total marks awarded 13/20