

Commentary on candidate evidence

The candidate evidence has achieved the following marks for each question of this question paper.

Question 1(a)

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

- ◆ The size is correct. **(1 mark)**
- ◆ The relief is flat, so suitable. **(1 mark)**
- ◆ Access to the A27 is within 100m. **(1 mark)**

Question 1(b)(i)

The candidate was awarded **4 marks** as follows:

- ◆ 'There is plenty of space to the South and East of the site to expand if the lorry park is successful' **(1 mark)**
- ◆ 'This is the road receiving highest traffic (diagram 3)' and 'The site is right beside the A27 so it adds no extra journey time for lorry drivers to stop there' **(1 mark)**
- ◆ 'This also makes it easy to deliver materials for construction' **(1 mark)**
- ◆ 'The land is very flat so construction costs will be reduced as levelling won't be required' **(1 mark)**

The following are further valid responses that would have attracted marks, had the candidate not already reached the full marks available:

- ◆ 'The site is a greenfield site so no previous buildings need to be demolished'. **(1 mark)**
- ◆ 'The site is just 2km from the centre of Southbourne, so locals can work in the lorry park' **(1 mark)**
- ◆ 'The site is also outside of the Chichester harbour AONB so it will be possible to obtain planning permission.' **(1 mark)**

No marks could be awarded for reference to the railway because this is a lorry park.

Question 1(b)(ii)

The candidate was awarded **4 marks** as follows:

- ◆ '...effect on people's mental and physical health' is mentioned at the end of the paragraph. **(1 mark)**
- ◆ '...traffic congestion as more lorry drivers will choose the A27 over alternative routes' **(1 mark)**
- ◆ '...loss of biodiversity such as plants, mosses, hedgerows and insects.' **(1 mark)**
- ◆ '...park will be open all night so noise pollution could disturb residents of Lumbly Croft (GR(756,066) particularly if they have young children.' **(1 mark)**

The following are further valid responses that would have attracted marks, had the candidate not already reached the full marks available:

- ◆ 'Increased quantity of impermeable concrete surfaces may increase surface water run-off causing a higher risk of flooding during heavy rainfall. This could damage the development as well as nearby houses, leading to expensive repairs.' (with reference to the atlas) **(1 mark)**
- ◆ 'Motels eg. GR(742,065) may have a decreased number of customers as drivers are stopping at the new lorry park. This could negatively impact the economic stability of some people in the local community.' **(1 mark)**

Question 1(b)(iii)

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

- ◆ 'Trees or wildflower meadows could be planted around the park to combat loss of biodiversity.' **(1 mark)**
- ◆ 'This would also make the area a more pleasant place to visit and shield the park from walkers using footpaths nearby or locals who find the development unsightly.' **(1 mark)**
- ◆ 'A high capacity drainage system could be implemented to minimise surface water flooding, as this could feed into the harbour at GR(752,054)'. **(1 mark)**
- ◆ 'a similar lorry park could be built on an alternative route.' **(0 marks)**
- ◆ 'hedge was constructed...noise would be dampened' as this is a repeat point of first two points. **(0 marks)**
- ◆ 'Motels...could open high-ropes course.' **(0 marks)**

Question 1(c)(i) & (ii)

The candidate was awarded **5 marks** for the combined response as follows:

- ◆ (i) '2 people stand on a bridge overlooking a main road (for example GR(789,070) facing opposite directions'. (1 mark)
- ◆ (i) 'Each person counts the number of vehicles which pass under the bridge in a set amount of time. (1 mark)
- ◆ (i) 'It might be good, if possible, to categorise the vehicles to find the number of lorries, cars, vans, etc' (1 mark), and (ii) 'however this makes it more difficult to collect data.' (1 mark)
- ◆ (ii) 'Thick fog could obscure visibility of the road, making it very difficult to count vehicles passing under the bridge.' (1 mark)
- ◆ 'If the road is particularly fast or busy, there could be one person counting for each lane of traffic' is a repeat point (0 marks)
- ◆ 'which could cause the surveyors to get bored, and will be expensive for the employer.' (0 marks)
- ◆ 'If there is heavy congestion and vehicles are moving very slowly it may be hard to remember which vehicles have been counted, making the results less accurate' is a repeat point (0 marks)

The following valid response would have attracted a mark, had the candidate not already reached the full marks available:

- ◆ (ii) 'This technique is very time-consuming and will need to be repeated at various times over multiple days or weeks' (1 mark)

Question 1(d)

The candidate was awarded **4 marks** as follows:

- ◆ 'Proportional symbols will be a good way of demonstrating differences in volume of traffic on the main roads. They allow the reader to quickly interpret magnitude since there is an immediate visual impression.' (1 mark)
- ◆ 'A scale must be carefully chosen so that the smallest symbol is big enough to see but the largest doesn't obscure a large section of the map.' (1 mark)
- ◆ 'There may be clustering of symbols near Chichester which could overlap, making it difficult to interpret or see the locations behind.' (1 mark)
- ◆ 'Proportional symbol maps are very time consuming to construct as the symbols area must be accurately calculated.' (1 mark)
- ◆ 'The base map should be kept as simple as possible to avoid confusion, however some readers may think the blank space has no roads.' (0 marks)

Question 1(e)(i) & (ii)

The candidate was awarded **5 marks** for the combined response as follows:

- ◆ (i) 'This area has a large, sheltered harbour with lots of marsh, reeds or saltings. This provides a unique habitat for many marine birds, or fish as well as grasses. Eg. GR(742,013)' **(1 mark)**
- ◆ (ii) 'Long beaches such as GR(789,970) attract tourists to relax on the beach, particularly in warmer weather. It also provides opportunities for watersports, for example sailing, kayaking, windsurfing or paddleboarding eg. GR(765,983)' **(1 mark)**
- ◆ (ii) 'The atlas shows this area has an average surface temperature of 16-17°C, one of the warmest in the UK, making it perfect for beach holidays.' **(1 mark)**
- ◆ (i) 'The main soil type is Gley and the natural vegetation Beech and Oak, which are native trees so likely to support a range of important native species. Trees are important for biodiversity and they allow survival of certain insects, fungi or lichens.' (linked to atlas) **(1 mark)**
- ◆ (ii) 'The flat land allows opportunities for many campsites such as in GR(792,976)' **(1 mark)**
- ◆ No marks are awarded for 'The land is generally very flat, which allows deep fertile soils for a variety of plant species, and is ideal for recreational golf courses such as in GR(695,992)' because there is no link here. **(0 marks)**

A carat is placed at 'The beach is south facing, so will receive direct mid-day sun.' because there is no link to land use.

Question 2(a)(i)

The candidate was awarded **4 marks** as follows:

- ◆ 'The triangle graph shows that in Australia in 1980, the population of 15-64 year old was 65%' **(1 mark)**
- ◆ 'The triangle graph showed that in 1980 Bangladesh had a population of mainly 0-14 year olds with it being around 45% **(1 mark)** however they only had a population of about 3% over 65 year olds.' **(1 mark)**
- ◆ 'showed that Luxembourg had the smallest population of 0-14 year olds with around 17%' **(1 mark)**
- ◆ No mark is awarded for the information about Ireland because the data is incorrect. **(0 marks)**

The following valid response would have attracted marks, had the candidate not already reached the full marks available:

- ◆ 'whereas they had the largest population of over 65 year olds at around 15% **(1 mark)** compared to Qatar at only 2% of 65+ year olds.' **(1 mark)**

Question 2(a)(ii)

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

- ◆ 'As they are less developed they have less access to healthcare such as birth control meaning a higher birth rate.' (1 mark)
- ◆ 'Another reason could be due to their lack of healthcare for new born babies so they may have multiple children in hope that a few stay alive, due to the death rate of babies being high.' (1 mark)
- ◆ 'lack of fresh water, this means older people could die of water related diseases or due to no medication for their illnesses. This resulting in a low percentage of old people.' (1 mark)
- ◆ No marks were awarded for 'A reason for the 65% of 15-64 year olds in Australia in 1980 shows a working population of healthy adults. As Australia is a MEDC, this means they have good access to doctors and healthcare to keep them healthy and alive.' as this is a reversal. (0 marks)
- ◆ No marks were awarded for the last paragraph (from 'It shows that...') because it is all description. (0 marks)

Question 2(a)(iii)

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

- ◆ 'A triangular graph is effective when comparing three components.' (1 mark)
- ◆ 'Another disadvantage is that it can only deal with percentages.' (1 mark)
- ◆ 'Another disadvantage is that it is very easy to make mistakes while plotting data, causing inaccuracy.' (1 mark)
- ◆ No marks were awarded for 'Another disadvantage is that only 3 components can be plotted and no more.' as this is a reverse point. (0 marks)

A carat is placed at 'However, they can be very hard to understand if not explained how to.'

Question 2(b)

The candidate was awarded **4 marks** as follows:

- ◆ 'Spearman's rank (SRC) is suitable for testing how strong the relationship between two variables is.' (1 mark)
- ◆ 'It is also useful as it is a lot easier to understand than Pearson's Product Correlation Coefficient so it minimises human error.' (1 mark)
- ◆ 'Another advantage is that it shows the relationship between the variables and tells us if they are positive or negative.' (1 mark)
- ◆ 'Another disadvantage is that it ranks the data, this makes the result less reliable.' (1 mark)

- ◆ No marks were awarded for 'A disadvantage is that it doesn't tell us the full range as the result only consists of one number.' **(0 marks)**

Question 2(c)

The candidate was awarded **4 marks** as follows:

- ◆ 'In Australia it shows the % of people from 0-64 all decreasing. This may impact the working population and result in worker shortages.' **(1 mark)**
- ◆ 'In China diagram 3 shows that the % of over 65s will increase by around 24%. This will result in China requiring more facilities for the elderly population such as increasing the number of carehomes available to citizens to ensure there are enough.' **(1 mark)**
- ◆ 'It is seen that in Peru the percentage of 0-14 year olds will decrease from 25-17%. This may be bad for nurseries and schools and could cause closures for them meaning a higher unemployment rate as a result.' **(1 mark)**
- ◆ 'It is seen in Ireland that the population of over 65s will increase from 15% to 27% this may result in the retirement age increasing.' **(1 mark)**
- ◆ No marks are awarded for 'a shortage of workers' because it is a repeat point. **(0 marks)**