GEOGRAPHY (BRUNEI)

Paper 2230/01

Multiple Choice

Question Number	Key	Question Number	Key
1	B	21	D
2	A	22	C
3	C	23	D
4	B	24	B
5	C	25	D
6	D	26	B
7	D	27	C
8	C	28	C
9	C	29	D
10	D	30	C
11	B	31	C
12	C	32	A
13	A	33	D
14	C	34	D
15	C	35	D
16	B	36	D
17	C	37	D
18	C	38	B
19	C	39	B
20	B	40	C

General comments

The mean score of the 1150 candidates was 19.99 out of a possible 40 marks, equivalent to 49.97%. This is slightly lower than in the past few years. The standard deviation was 5.276. The highest mark reached was 36, this being achieved by just one candidate, two other candidates scoring 35 marks. 25 candidates scored fewer than 10 marks, including two who were awarded the lowest score of 6 marks. The sections on Settlement and Population generally produced higher marks than the one based on Physical Geography.

Questions which candidates generally found easy were 2, 4, 5, 14, 15, 25, 26, 27, 28, 30, 33, 39 and 40.

Questions which candidates generally found difficult were 7, 12, 18, 23, 29, 31 and 32.

Comments on individual questions

7   Both Baruka and Kanami have summits of over 1300 metres and over four-fifths of candidates selected one of these. The correct answer, Sagara, does not have a spot height marked and only careful study of contouring confirms its height. Only this hill satisfies the description of the lower peak given.

12   The areas of cultivation occupy the lowest areas and avoid the hills. Lack of understanding of the term *relief* may have hindered some candidates.

18   The low scoring and low discrimination here suggest that candidates were unaware of the importance of friction along the river's bed and banks.

23   The peaks in March and September are clearly linked to the equinoxes, giving D as the correct answer.

29   The question did not discriminate well. The model is probably an unfamiliar one and both B and C options probably attracted good candidates.

31   Option C shows heaviest traffic during the morning and evening "rush hours" with moderate flows at lunchtime. The times of the main peaks is possible inaccurate in the case of some cities.

32   The advantages of site A are its nearness to a main road and railway which would be helpful in reaching more distant markets whilst local residents would provide on-the-spot demand. Land costs on the city fringe are likely to be lower.

GEOGRAPHY [BRUNEI]

General comments

All Examiners commented on the continued improvements which have been made by the candidates from most Centres. In particular there is clear evidence that most candidates took time to think about the relevance of their writing and this ensured that there was a much better use of time, with far fewer candidates failing to complete four questions in full. As a result there were very few weak candidates scoring below 20% and an increase in the numbers who achieved marks between 30% and 60%. Unfortunately, it seems that the proportion of top candidates has not increased and this will only happen when close attention is paid to the following points:

●   While the reduction in irrelevant material is welcome, many candidates fail to write with sufficient depth and therefore score well below the maximum mark. Candidates should note the number of marks allocated to different parts of a question and adjust their writing accordingly. Clearly more detail is expected for a part with 7 marks than one with only 2 marks.

●   Most candidates do not describe well. In **Questions 1[b], 2[a] 4[bii]** and **5[ai]**, for example, descriptive writing was required based on resources such as maps, graphs and diagrams which were provided. Invariably these answers are far too basic in nature and much more detail is needed to secure the marks.

●   Only the best candidates are able to integrate the use of examples into their answers. There are still too many candidates who fail to follow the instruction to name examples they have studied and consequently write very general answers which do not score well. Several previous reports have commented on the importance of using case studies from the home area and the wider area of South East Asia in the preparation for this examination and this needs to be stressed once again.

●   There are some parts of the syllabus which regularly appear unpopular to candidates and which generate very low marks if attempted. In this examination conurbations and new towns [**Question 7**], tin mining [**Question 11**] and farming on terraces [**Question 5**] illustrate this point. While it is clear that Centres tend to specialise in studying only certain parts of the syllabus, this specialisation should not be so narrow as to penalise their candidates if the questions on their preferred areas of the syllabus are not to their liking.

Comments on specific questions

Question 1

Popular and generally well answered.

(a) [i]   Very clear labelled diagrams of the rain gauge were submitted either in complete or "exploded" form.

[ii]   Many candidates wasted time here by describing the siting of a rain gauge before explaining how it is read with reference to the measuring cylinder and the importance of reading from the bottom of the meniscus at eye level.

[iii]   The best site, **C**, was usually selected. Candidates then explained that it was in an open, unsheltered area away from buildings and trees and on a soft grass surface. Credit was also gained by explaining why the other sites were not as appropriate.

[iv] There were many excellent answers, often incorporating a clear diagram, to explain the formation of convectional rainfall. These explained how air is warmed by contact with a heated surface and then rises and cools to reach the dew point. Further cooling leads to condensation and the formation of cumulonimbus clouds which then release their water in the form of torrential showers.

(b) (i) Often a weak part of the question as the majority of candidates wrote generally about rainfall totals in Brunei without describing the different totals in relation to features shown on the map. Credit was gained by emphasising the highest rainfall in the south, especially near to the named mountains, with a general decrease towards the coast and the lowest rainfall near Sinaut.

[ii] Many candidates simply offer Brunei's equatorial location as the main reason for its high rainfall without going on to explain the implications of this. More should have been made of the effect of the low pressure belt [ITCZ] with its rising air, the influence of the two monsoon seasons and the impact of convectional and relief rainfall in areas of Brunei.

Question 2

[a] [i] Very few candidates were able to determine from the contour interval that the height of the volcano was over 3500 metres and attempts at describing the shape were often very superficial. From the contour pattern it should have been clear that the volcano had steeper slopes higher up, producing a cone shape. Lower down the gentler slopes were more elongated to the east, with a small secondary peak to the south east.

[ii] Most candidates identified the features correctly.

[iii] Many good answers to this were produced, starting with reference to plate movements and the resultant melting of the subducted plate to produce magma. While most candidates could then relate the volcano to the rising of magma through a vent to erupt on the surface, very few attempted to explain the alternate layers of ash and lava which are the main feature of a composite cone. For this there needed to be reference to the lava moving out of the crater and down the sides of the cone while the ash is thrown high in the air to settle on the lava sometime later.

[iv] The advantages are very well appreciated in terms of rich soils for farming, attractive scenery for developing the tourist industry and the use of natural hot water springs for domestic use and the generation of geothermal electricity. Each of these and other valid ideas was often developed to good effect through the use of examples to illustrate.

[b] Both aspects of this question were well attempted. The features associated with a destructive plate boundary include volcanoes, earthquakes and fold mountains while the movement can be explained by describing the convection currents in the mantle which, in some areas, cause adjacent plates to converge and one of them to sink.

Question 3

A very popular question in which candidates accurately interpreted the map offered and also used their local knowledge to good effect.

[a] [i] Candidates appreciated the importance of a hotel's location in a very accessible place, especially close to shops, offices and tourist sites such as Kampong Ayer.

[ii] Credit was gained by naming any three services found in a CBD such as shops, banks and offices.

[iii] The location of the new shopping centre could be explained in terms of its nearness to a main road with access to the CBD, residential areas and the airport as well as the possible congestion of shopping in the CBD and the more expensive land rental costs there.

[iv] Likewise, some of the advantages of the industrial area at **A** were described, as cheaper land with more space away from the city Centre with good access to the airport and new shopping area along the main road. Nearby residential areas could supply the labour while the river could be a source of water [but not somewhere to dump waste!].

[v] Any example of a cottage industry was accepted and possible reasons for their development at Kampong Ayer could be the satisfaction of local and tourist needs, the traditional skills of the inhabitants and the encouragement of the government to promote the culture of the people.

[b] In this part it was important for candidates to distinguish between the factors, or controls, which have allowed fishing to develop and the importance of fishing to Brunei and its people. This is a popular topic but many candidates failed to separate the two parts and submitted confused answers, which underscored.

[i] Factors include the physical aspects of the coast and sea areas, such as the long, sheltered coastline of bays and estuaries, and the economic factors of very high demand, the skilled workers, recent technological developments and government incentives.

[ii] The importance of fishing may be explained in terms of the nutritional value to Bruneians' diet, employment income and the key role in diversifying the economy away from an overdependence on oil and gas.

Question 4

[a] [i] Although many candidates included human as well as natural attractions in their answers, this scored well, as candidates used their local knowledge to describe named physical features such as beaches, forests, mountains and caves as well as the diverse wildlife and weather conditions of the area.

[ii] Generally very well-informed answers, which included benefits to the countries and the people. These included the creation of income through employment, the acquisition of foreign exchange, and the development of improved infrastructure based on this increased income. In addition there are the social benefits of culture exchange as well as the diversification of the local economy.

[iii] This was usually very well answered but for full credit there needed to be a balance between problems related to the environment and those related to people.

[b] [i] Once again candidates used their local knowledge to describe the facilities available for tourists at the international airport and in the capital. It was encouraging to note the willingness of candidates to do so as there has been a reluctance in the past.

[ii] This was invariably the weakest part of the whole question, as few candidates succeeded in realising that there was a general decrease in the number of flights with increasing distance from Brunei. It was hoped that they would recognise this general trend and then point out that Manila and Frankfurt were exceptions to the general rule. With such a poor start it is understandable that very few candidates were able to offer valid reasons for the variations.

Question 5

There were very few examples of this question to be marked. When it was attempted, part **[a]** was a much weaker component than [b].

[a] [i] Very limited answers. It was surprising that candidates were unable to describe the terracing in the diagram. Reference to the level or flat horizontal surfaces separated by vertical walls would have sufficed while a description of the "cut and fill" technique would have explained how terracing is done. The reasons for terracing are many and include the practice of farming activities, the prevention of soil erosion and the retention of water.

[ii] Answers should have been based on a case study of a farming type found outside of the home area but this requirement was generally ignored. It was anticipated that some form of intensive subsistence farming, such as rice or vegetable cultivation, would have been selected and that candidates would be able to describe the inputs, processes and outputs of the system.

[b] [i]   Again a named area was required in Monsoon Asia outside of the home area but this was rarely forthcoming and candidates submitted general accounts of the main causes of soil erosion. While this general knowledge was adequate, answers lacked the realism of a case study and therefore did not score well.

[ii]   This was a better sub-section, as general ideas could be credited. Candidates described a wide range of preventative measures such as shelter belts, contour ploughing, strip cropping and crop rotation.

[iii]   As the point of the question concentrated on the improvement of crop yield, rather than output, multiple cropping was not an acceptable answer. Yield may be increased by using Green Revolution techniques such as the use of fertilisers, pesticides, irrigation, drainage and HYV seeds.

Question 6

[a]   This part of the question was very well attempted by almost all candidates, who demonstrated a detailed knowledge of the structure and characteristics of the two types of forest. In both cases descriptive detail covered the forests' layers, tree types, leaf characteristics and root systems. This was a very good start for most candidates.

[b] [i]   Several areas were named but each one had to be within the wider area of South East Asia to gain the mark allocated.

[ii]   Answers depended on the named area selected in **[b][i],** but in the majority of cases candidates restricted their comments to the five factors shown on the diagram and were able to develop ideas based on these prompts. The case study approach worked very well in these circumstances.

[iii]   This was a more general question on the importance of forests and candidates clearly understood their value. References were made to the need to maintain biodiversity and an extensive resource base, while conserving habitats for wildlife. In addition the importance of forests to soil and climate stability were also well explained

[iv]   Very well understood in general terms, with clear ideas about forest management and conservation. Candidates explained how forest clearance could be controlled by selective logging while other areas could be designated protected areas or National Parks. Outside of the forests themselves the impacts of recycling, environmental pressure groups and education were described.

Question 7

A very unpopular and disappointing question.

[a] [i]   Very few candidates understood the demands of the question and failed to notice that the emphasis was on the changes in **growth** between South East Asia and the other two continents. Most answers simply quoted statistics from the table with no attempt to derive statistics which would show changes in growth over and during the time period shown. This was a very disappointing start for almost everyone.

[ii]   The causes of the growth of large cities were much better understood and included industrialisation, natural population increase and the push and pull factors which contribute to rural-urban migration.

[iii]   Conurbations were not well appreciated and nor was their importance in providing services to their people [**C**]. The definition of a conurbation was usually weak [**A**] while only a few candidates were able to name a conurbation, such as Tokyo, let alone describe its site and position [**B**].

[b]   Very few candidates knew anything about New Towns and many confused them with shanty towns. Examiners expected candidates to name a New Town in Singapore such as Toa Payoh or Ang Mo Kio and then use a case study approach to describe the variety of housing types, services and employment opportunities provided for the inhabitants.

Question 8

Probably the most popular question and one which scored well.

[a] [i]   **A** 0-4
    B 30-34
Some candidates lost marks by quoting descriptive terms like "young dependents" [for **A**] and "working independents" [for **B**] when the question clearly asked for age ranges.

[ii]   Credit was awarded for simple descriptive points, such as the wide base and narrow top with almost straight sides between 15-19 and 40-44. As no interpretation was asked for no marks were given for comments on birth and death rates.

[iii]   Both **A** and **B** increased.

[iv]   Candidates explained that death rate would fall and life expectancy would increase and then usually went on to give reasons for these changes. Reference was made to improved health care facilities and better medication for the elderly as well as expected improvements in diet, water quality and housing.

[v]   The main problem created by an increase in the elderly was the increase in the dependency ratio with the government having to provide more money to support the ageing population. More money will be required for care homes, pensions and health facilities.

[b] [i]   Very well answered with regards to the problems associated with overpopulation. Problems such as the increase in young dependents, increased unemployment, possible lack of food and clean water and lack of adequate housing were all credited.

[ii]   Most candidates selected China's "One Child Policy" and explained in detail how co-operative families are rewarded with incentives, while families with more than one child are penalised.

Question 9

[a] [i]   Much more could have been made of this question but candidates seem to lack experience in describing what they see on a diagram.

    The river could be described as wide and deep while it bends, or meanders, between the levees on its sides. The flood plain is wide and flat, with features such as an ox bow lake and bluffs.

[ii]   This was usually explained well with the help of a series of diagrams. Examiners awarded marks for mention of the continuous erosion on the concave sides of a meander neck, which becomes more pronounced with time. Eventually the river breaks through the neck during flood and the meander loop is sealed off by deposition.

[iii]   While most candidates realised that area **X** had larger particles, only the best candidates continued to explain that the heavier particles are deposited first as the power of the floodwater reduces. Smaller and lighter particles can be carried further away.

[b] [i]   The Ganges and Brahmaputra Rivers were usually correctly named before the problems associated with the flooding were described. For credit the problems had to be mentioned in the newspaper article

[ii]   It was surprising that many candidates only mentioned one benefit when the total mark for this sub-section was 3. Benefits included water and silt for farming purposes, fishing and communications.

[iii]   Here candidates could include the causes of river flooding in general. Credit was awarded for ideas such as prolonged heavy rainfall, spring snow melt, deforestation of slopes, silted-up river channels, tidal surges and high tides.

Question 10

There were very few examples of this question. When attempted, the coral reef part scored better than the sand spit part.

[a] [i] Descriptive terms such as long, narrow, low and curved would have secured the marks but this was rarely well answered.

[ii] Candidates needed to use the diagram to explain the process of spit formation at **S**. The soft clay cliffs would be eroded to form the sediment which is the transported southwards by the longshore drift towards the river mouth. Where the direction of the coastline changes the longshore drift continues to transport and then deposit the sediment across the river mouth to form the spit. The storm waves from the east cause the spit to curve inland.

[iii] A bar forms when sediment accumulates quicker than the river can carry it away. The river mouth may be completely sealed off by heavy deposition of sediment from the sea by violent storm waves.

[b] [i] The correct names were fringing [**A**], barrier [**B**] and atoll [**C**]

[ii] **X** is a lagoon.

[iii] Any three differences were credited. The diagrams show that reef **B** is larger, has sediment in its lagoon and is further away from the land.

[iv] Candidates answered this well. Ideal conditions for coral growth are shallow, warm seas with temperatures above 20C; clear, clean water with a plentiful supply of oxygen and plankton.

Question 11

The most unpopular question on the paper.

[a] [i] Candidates had to use the three graphs to describe the changes in tin mining over the time period shown. While credit was given for stating that the number of employees, number of mines and production had all declined, it was necessary to identify the different rates of change across the three years shown for extra marks.

[ii] The general reduction could be explained in many ways. Relevant ideas would be mine exhaustion, rising costs, overseas competition, a fall in tin prices and increased mechanisation.

[iii] If more tin was used in 2004 it could result in an increase in demand for Malaysian tin. Therefore there is the possibility of more exploration leading to new mines opening and an increase in both workers and production.

[b] [i] Very few candidates knew the names of types of mining appropriate for the conditions stated in **A** and **B**. Shaft mining or opencast would suit **A** while gravel pump, dredging or dulang washing are used for **B**.

[ii] As **[b][i]** was so poorly answered, descriptions of the types of mining were very limited and often non-existent.