

Candidate Marks Report

Series : 6 2018

This candidate's script has been assessed using On-Screen Marking. The marks are therefore not shown on the script itself, but are summarised in the table below.

Centre No :	Assessment Code :	J384
Candidate No :	Component Code :	03
Candidate Name :		

Total Marks :

In the table below 'Total Mark' records the mark scored by this candidate.
'Max Mark' records the Maximum Mark available for the question.

Answer all the questions.

1 (a) Study Fig. 1 in the separate Resource Booklet, a GIS map of Rio de Janeiro.

(i) Identify **one** human feature of Rio de Janeiro shown on Fig. 1.

The cities

 [1]

(ii) Identify **one** physical feature of Rio de Janeiro shown on Fig. 1:

The National park of Tijuca

 [1]

(iii) The city boundaries of Rio de Janeiro in 1900 and 2015 are outlined on Fig. 1.

Estimate the area of Rio de Janeiro in **1900** in km².

7 km² [1]

(iv) Using Fig. 1, describe the location of Copacabana Beach.

Copacabana beach is located at the coast of Rio de Janeiro and is within the Rio de Janeiro city boundary 1900. Copacabana beach is next to the city Ipanema.

 [3]

(b) Study Fig. 2 in the separate Resource Booklet, photographs and reviews of three coastal areas in Rio de Janeiro.

State **two** human uses of Rio de Janeiro's coastal areas seen in Fig. 2.

1 tourist attractions
 2 water sports activities beach football.
 [2]



- (c) Study Fig. 3 in the separate Resource Booklet, beach management strategies used in Brazil.

450 metres of Copacabana Beach, in Rio de Janeiro, needs coastal management to avoid widespread coastal erosion.

- (i) Calculate the cost of rock armour for Copacabana Beach.

£ 45000 $450 \div 100 = 4.5$ ^{4.5} metre [1]

- (ii) Using your own understanding, suggest whether beach nourishment or rock armour would be most appropriate for coastlines with high levels of erosion by hydraulic action.

..... rock armour is most appropriate because beach
 nourishment negative is that erosion and transpor-
 - tation of material continues along the beach so nourishment
 needs to be maintained or redone very regularly ^{where it} while [2]
 for rock armour, the rock will eventually erode.



- (d)* Study Figs 3 and 4 in the separate Resource Booklet, beach management strategies used in Brazil and a sketch showing impacts of beach nourishment (beach replenishment) at Copacabana Beach.

Using Figs 1, 2, 3 and 4 and your own understanding, explain how challenges in the city of Rio de Janeiro affect the coastal landscape.

Due to the large and rapid population growth over the years due to urbanisation, Rio de Janeiro and tourist attraction, Rio de Janeiro has the Brazilian government has to provide the coastal landscape with beach managements which will be sustainable and cost effective in helping with the attraction of tourists.

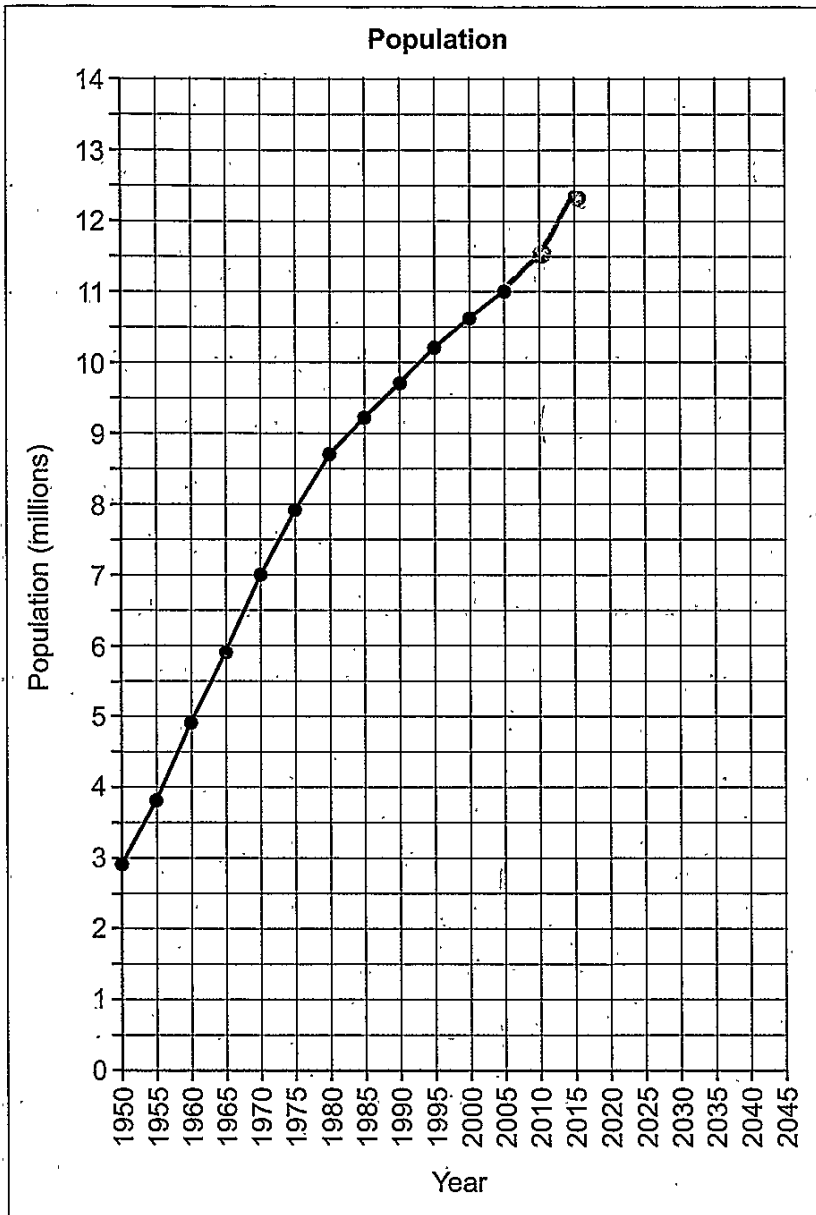
In addition, By using beach management strategies such as beach replenishment (nourishment) it would create a wide beach that would be kept clean and regularly replenished keeping the area a tourist attraction in the area. In addition, furthermore businesses such as bars and restaurants are going to be located on the beach helping with the businesses and the increase in tourist attraction. In addition, Moreover, there would be an increase in large hotels near the beach which would be a source of income for local people.

Other challenge in the city of Rio de Janeiro which would affect the coastal landscape would be having the tourist within the beach as a result it would cause more litter to be on the beach and due to the rise in tide and long shore drift, more litter would be picked up by the ^{water} sea and enter the sea, harming the animals and organisms within the coastal landscape.

[12]



- 2 (a) The graph and table below show the population of Rio de Janeiro.



Year	Population (millions)
1950	2.9
1955	3.8
1960	4.9
1965	5.9
1970	7
1975	7.9
1980	8.7
1985	9.2
1990	9.7
1995	10.2
2000	10.6
2005	11
2010	11.5
2015	11.9

- (i) Complete the line graph for 2010 and 2015 using the table of data provided. [2]

- (ii) Predict the population of Rio de Janeiro in 2040, based on the current growth rate.

~~1990~~ 17.5

[1]



- (b) Rio de Janeiro can be considered a world city:

Explain the characteristics of a world city.

The characteristics of a world city would be having links to other countries around the world. Having a high rate of ~~income~~ ^{money} ~~tourists~~ ^{tourists} ~~come from tourism~~ ^{tourism} tourism. In addition, having the ~~state~~ global trade links allows the ~~city~~ city to become popular.

[4]

- (c) Study Fig. 5 in the separate Resource Booklet, statistics for Rio de Janeiro and Brazil.

Using Fig. 5 and your own understanding, explain why Rio de Janeiro has experienced rapid urban growth.

Rio de Janeiro has experienced rapid urban growth due to the city being one of the most popular in the country. ~~Many people~~ ~~live~~ ~~there~~ ~~because~~ ~~there~~ ~~is~~ ~~a~~ ~~rapid~~ ~~urban~~ ~~growth~~ ~~due~~ ~~to~~ ~~their~~ ~~being~~ ~~more~~ ~~opportunities~~ ~~and~~ ~~services~~ ~~that~~ ~~provide~~ ~~more~~ ~~help~~ ~~for~~ ~~the~~ ~~more~~ ~~sustainable~~ ~~than~~ ~~anywhere~~ ~~else~~ ~~in~~ ~~Brazil~~. The average monthly income in Rio de Janeiro is ~~\$~~ \$ 563 while the rest of Brazil is \$ 378 per person. ~~This~~ ~~is~~ ~~because~~ ~~the~~ ~~unemployment~~ ~~rate~~ ~~in~~ ~~Rio~~ ~~de~~ ~~Janeiro~~ ~~is~~ ~~6.8%~~ ~~while~~ ~~in~~ ~~Brazil~~ ~~it~~ ~~is~~ ~~12.6%~~ ~~therefore~~ ~~more~~ ~~people~~ ~~are~~ ~~moving~~ ~~to~~ ~~the~~ ~~city~~ ~~for~~ ~~job~~ ~~opportunities~~ ~~and~~ ~~for~~ ~~a~~ ~~better~~ ~~quality~~ ~~of~~ ~~life~~ ~~than~~ ~~the~~ ~~rest~~ ~~of~~ ~~Brazil~~.

[6]



3 Study Fig. 6 in the separate Resource Booklet, a map of Botafogo, a suburb of Rio de Janeiro, and Fig. 7, photographs taken in the Santa Marta squatter settlement (favela).

(a) (i) Use Fig. 6 to calculate the distance in km from (A) Santa Marta to (B) Botafogo beach.

0.67 km [1]

(ii) Santa Marta is one of the squatter settlements found in Rio de Janeiro: Using Figs 6 and 7, briefly explain one challenge people living in Santa Marta may face.

Overcrow One challenge people living in Santa Marta may face is ~~not~~ ^{having} the squatter settlements in dangerous and very steep ~~areas~~ ^{land}, this could ~~harm~~ ^{injury or kill} the people if ~~they~~ ^{there} is an earthquake or if the overcrowded ^{houses} ~~house~~ topple over each other due to lack of ground stability. [2]

(b) Using Figs 2, 6 and 7 in the separate Resource Booklet, and your own understanding, assess the contemporary challenges created by the inequality within Botafogo.

~~Botafogo~~ within Botafogo Botafogo there are many contemporary challenges created by the inequality within the area: Very close to Botafogo's suburb and beach area there is a high Santa Marta which is a favela in the steep land of Botafogo. This causes a challenge for the government as the beach in Botafogo is a tourist attraction therefore if the tourists see the favela they might not come back due to the ~~dirty~~ ^{poor state} ~~poor~~ ^{treatment} ~~causing the government to be~~ of the Brazilian civilians have to face. In addition, in the favela there is high crime rates due to the poverty in the favelas therefore the area in Botafogo and mostly Santa Marta would be dangerous therefore endangering innocent lives. Furthermore in Santa Marta there is ~~not much~~ insufficient clean water [6] and because the squatters ~~are in~~ ^{have} built the favelas illegally, there is no proper sewage system ~~therefore~~ and from the overcrowded houses therefore there is a higher risk of disease or infection spreading.

* causing the government to break down the favelas and make the families homeless with no support from the government.



RIO DE JANEIRO IS BANKRUPT FOLLOWING 2016 OLYMPIC GAMES

Rio de Janeiro warns other Olympic host cities of the hidden costs of hosting the games as they struggle to pay for public services in the city. One resident said, "We hosted a fantastic party but now it's a desperate situation. We simply do not have enough money to pay all of our bills and this means that we are facing huge cuts".

Rio de Janeiro is facing many challenges, both physical and human, and, as outlined in the article above, the city now has a very limited budget.

Using the information in the separate Resource Booklet and your own understanding:


1. Examine whether you think that Rio de Janeiro should prioritise coastal management or improving the squatter settlements (favelas) over the next 10 years?
2. Suggest how your decision could lead to long-term sustainability for the city.

I think that Rio de Janeiro should prioritise in improving the squatter settlements (favelas) over the next 10 years? because the families in the favelas are in a dangerous living area as they have lack of resources to survive therefore many have to live off the money that ~~is~~ given off from working in the informal sector. This is dangerous as the ~~per~~ worker is ~~per~~ most likely working for long hours than normal with very little pay and in dangerous ~~areas~~ places where they have no workers rights to protect them. therefore the families are stripped from their human rights. If the government prioritised the favelas then the families get to work at a real employment job and would be able to pay tax which would benefit the government and as there are many families working in the informal sector more ^{tax} money would be given to the government than before the budget cuts / limited budget, helping the city have more money.



In addition, children are able to go to school due to the parents getting monthly secure pay whereas children would of had to drop out of education to help ~~the~~ their families with work therefore when they grow up they would be stuck within the cycle with their own families.

The government by prioritising ~~facets~~ ~~facel~~ over the next 10 years would be able to build infrastructure with clean water, sewage systems and ~~basic~~ resources that would be able to house the families from ^{the} [12] ★

 Spelling, punctuation and grammar and the use of specialist terminology [3]

gang

END OF QUESTION PAPER



ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

4[#]

[Continuation] Squatter Settlements: The ~~sq~~ favela houses/shacks where ^{it is} dangerous to live in as their ~~has~~ no ground stability that would ~~stop~~ ~~the~~ protect the families within the homes if a natural disaster occurred. In addition, the homes are overcrowded in favelas as there is a large population of people living in poverty within favelas therefore homes are very tiny with big families as the dwellers within favelas are unable to purchase contraception as it is expensive. Due to the overcrowding, if a disease or infection was to be caught then it would spread more easily being contagious and as many are unable to afford medicine, many people (especially the young) would die or ~~be~~ become very weak and ill. Therefore if the government prioritised the favelas then the people and families would be able to live safely and would be able to buy resources such as tampons/pads, contraceptives and medicine to keep themselves safe and well therefore the tax ~~too~~ from the purchaser would go towards the government to helping ~~the~~ government in using the money in other services and tourist attractions. In ad

In addition, if the government were to ~~give~~ ^{prioritise} favelas and the children were able to get an education, then more would go to higher education (degrees, universities, colleges) and would get a better secure job in tertiary employment therefore ~~it~~ would help provide the government more money however it would also allow more people to work in jobs ^{to be} such ~~as~~ ~~docto~~ bus drivers,



doctors/nurses or as teachers ~~therefore~~ providing services
to their employment so that ~~the govern~~ there wouldn't be anymore
budget budget cuts within tertiary employment.



Area with horizontal dotted lines for writing.

OCR
Oxford Cambridge and RSA

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, First Floor, 9 Hills Road, Cambridge CB2 1GE.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

