TEST CODE **01225020**

FORM TP 2011080

MAY/JUNE 2011

C A R I B B E A N E X A M I N A T I O N S C O U N C I L

SECONDARY EDUCATION CERTIFICATE EXAMINATION

GEOGRAPHY

Paper 02 – General Proficiency

2 $\frac{1}{2}$ hours

26 MAY 2011 (a.m.)

READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This paper consists of **TEN** questions in **FOUR** sections.
2. Section A consists of **ONE compulsory** question. EACH of Sections B, C and D consists of **THREE** questions.
3. Candidates **MUST** answer **FOUR** questions: Question 1 from Section A and **ONE** question from **EACH** of Sections B, C and D.
4. Begin **EACH** answer on a new page.
5. Credit will be given for the use of relevant sketch maps and diagrams.
6. The use of non-programmable calculators is permitted.
7. The use of geometrical instruments is permitted.
8. Write all of your responses in the answer booklet provided unless otherwise stated in the question. **ALL** inserts used **MUST** be fastened securely to your answer booklet.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

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SECTION A (Mapwork)

Candidates MUST attempt this question.

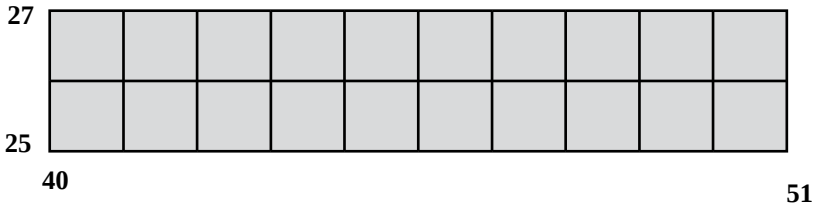
1. Study the map extract of Mango Creek, Belize (scale 1:50 000), **provided as an insert**, and answer the following questions:

(a) What is the six-figure grid reference of the MAJOR trigonometrical (trig) station, DOS 145, at the junction of the Southern Highway and the secondary road? **(2 marks)**

(b) What is the distance (to the NEAREST 100 metres) along the secondary road from the trig station DOS 145 to the end of the road in the village of Mango Creek? **(2 marks)**

(c) What is the compass bearing **from** the trig station DOS 145 to the crossroad junction of the secondary roads near to August Creek? **(2 marks)**

(d) (i) Study the area on the map extract enclosed by Eastings 40 and 51 and Northings 25 and 27, as shown below and list THREE types of vegetation found in the area. **(3 marks)**



(ii) List TWO services available in the village of Independence. **(2 marks)**

(e) Figure 1 **(provided as an insert)** is a profile (cross-section) along Northing 29, from Easting 47 to Easting 52. Using the map extract as a guide, label the features marked 1, 2 and 3 on the profile. **(3 marks)**

(f) Identify FOUR drainage features of the area shown on the map. **(4 marks)**

(g) Figure 2 **(provided as an insert)** shows a part of the map enclosed by Eastings 40 and 45, and Northings 31 and 34. **On the figure**, using the map as a guide,

(i) shade ALL land over 20 metres above sea level

(ii) label TWO different types of landforms (plateau, plain, valley, spur, ridge, mountain, canyon.) **(4 marks)**

(h) Study the areas of permanent cultivation and give a reason for the relationship between their position and EACH of the following:

(i) Settlement **(2 marks)**

(ii) Drainage **(2 marks)**

(iii) Relief **(2 marks)**

Total 28 marks

GO ON TO THE NEXT PAGE

SECTION B (Natural Systems)

Answer ONE question from this section.

2. (a) Draw a diagram of a composite volcanic cone and label FOUR features. **(4 marks)**

(b) (i) Define EACH of the following terms:

a) Extrusive volcanic features **(2 marks)**

b) Intrusive volcanic features **(2 marks)**

(ii) State FOUR changes which extrusive volcanic features may undergo over time. **(4 marks)**

(c) (i) Explain how earthquakes occur at transform plate boundaries. **(4 marks)**

(ii) Account for the nature of the eruptions and the shape of volcanoes at the following plate boundaries:

a) Convergent

b) Divergent **(8 marks)**

Total 24 marks

3. (a) Draw a diagram of the water cycle and label the FOUR MAIN processes. **(4 marks)**

(b) Identify TWO important features of EACH of the following drainage patterns:

(i) Dendritic **(2 marks)**

(ii) Radial **(2 marks)**

(c) (i) Define EACH of the following:

a) Stalactites **(2 marks)**

b) Swallow holes **(2 marks)**

(ii) Account for the formation of cockpits in the Caribbean. **(6 marks)**

(d) Explain how wave-cut platforms are formed. **(6 marks)**

Total 24 marks

GO ON TO THE NEXT PAGE

4. (a) A world map **is provided as an insert** for this question.

(i) On the map provided, shade an area where EACH of the following types of climate is experienced:

a) Equatorial

b) Tropical continental

c) Tropical marine **(3 marks)**

(ii) For ONE of the climate types in (a) (i) above, insert the name of the area on the map. **(1 mark)**

(b) Choose TWO of the climate types in (a) (i) and for EACH, describe TWO characteristics of EACH of the following:

(i) Temperature

(ii) Rainfall **(8 marks)**

(c) (i) State TWO reasons why a common period of 30 years of weather data is needed to determine the climate of places. **(4 marks)**

(ii) Explain why mountainous regions usually have lower temperatures and higher rainfall than the surrounding lowlands. **(8 marks)**

Total 24 marks

SECTION C (Human Systems)

Answer ONE question from this section.

5. (a) Study Figure 4 below and answer the questions which follow.

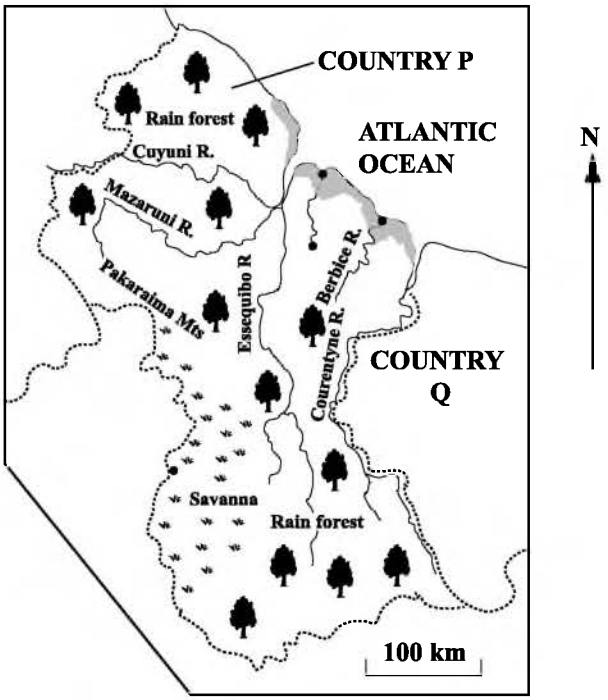


Figure 4.

(i) Using evidence from the map, list TWO features which may be associated with low population densities in Country P. **(2 marks)**

(ii) Name the countries labelled

a) P **(1 mark)**

b) Q. **(1 mark)**

(b) With reference to population, define the terms

(i) natural increase

(ii) migration. **(4 marks)**

(c) Describe the pattern of international migration for a **named** Caribbean country over the last twenty years. **(4 marks)**

(d) Explain how TWO factors influenced rural-to-urban migration. **(4 marks)**

(e) Explain how FOUR factors have influenced high population densities in a **named** Caribbean country. **(8 marks)**

Total 24 marks

6. (a) Study Table 1 and answer the questions below.

TABLE 1: CONTRIBUTION OF VARIOUS SECTORS TO GROSS DOMESTIC PRODUCT

Country	Primary %	Secondary %	Tertiary %
A	3	7	90
B	10	15	75
C	5	33	62
D	10	26	64
E	1	57	42

(i) For which country did primary activities make the SMALLEST contribution to GDP? **(1 mark)**

(ii) For which country did secondary activities account for approximately a third of GDP? **(1 mark)**

(iii) For which countries did secondary and tertiary activities account for 90% of GDP? **(1 mark)**

(iv) How are the contributions of primary, secondary and tertiary activities similar for all of the countries shown EXCEPT Country E? **(1 mark)**

(b) (i) Define the term 'secondary industry' and give ONE example of a secondary industry that you have studied. **(3 marks)**

(ii) State THREE ways by which countries can benefit from the development of secondary industries. **(3 marks)**

(iii) State TWO economic factors which may influence the location of a secondary economic activity. **(2 marks)**

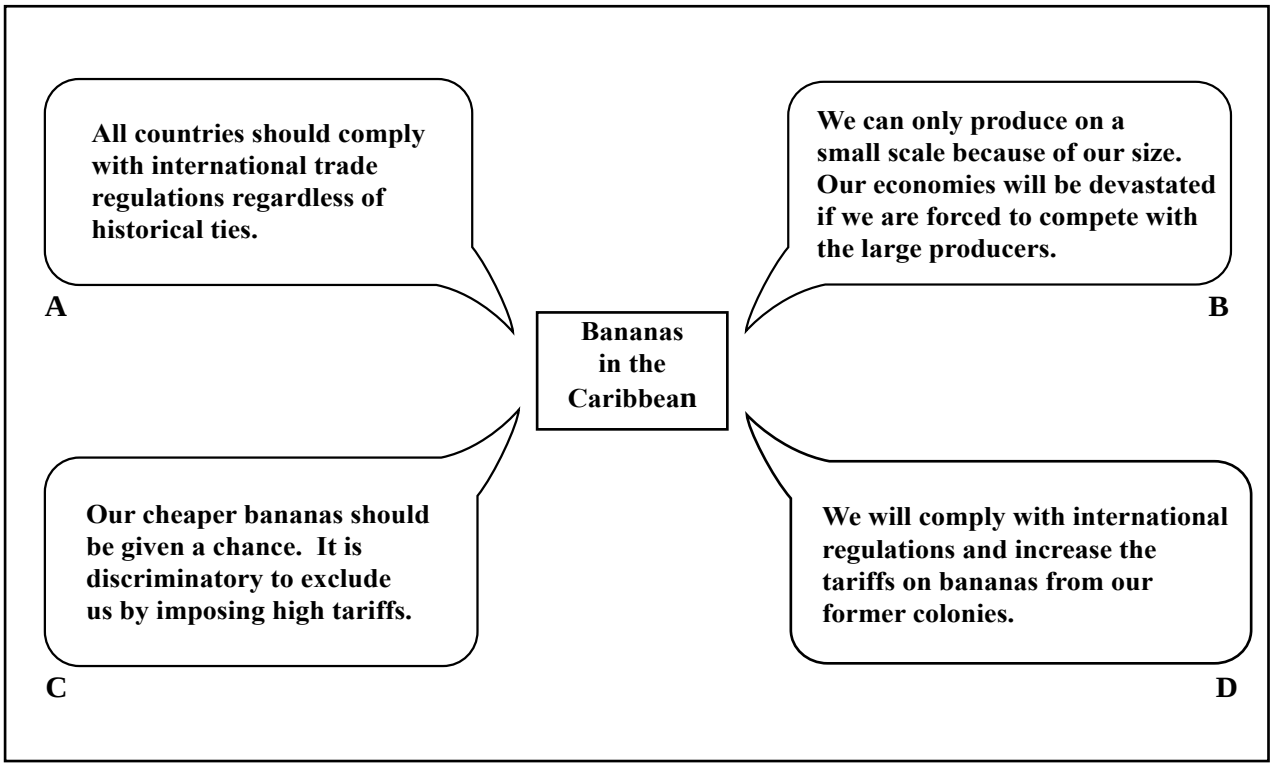
(c) Explain THREE policies that government may use to promote sustainable development in primary economic activities. **(6 marks)**

(d) Explain THREE challenges faced by ONE of the following activities in a Caribbean country.

– Fishing
– Forestry
– Mining **(6 marks)**

Total 24 marks

7. The illustration shown below highlights the attempts by the World Trade Organization (WTO) to regularize trade between nations. The world trade in bananas brought into focus the varying views held on trade by four groups: South and Central American banana producers, the European Union, the WTO and the Caribbean banana producers.



(a) State which interested party would be MOST LIKELY to make EACH of the statements, A, B, C, D above. **(4 marks)**

(b) (i) Describe FIVE characteristics of commercial arable farming in a Caribbean country you have studied. **(5 marks)**

(ii) For the country you named in (b) (i) above, state THREE problems, other than marketing, which affect commercial arable farming. **(3 marks)**

(c) Explain BRIEFLY one reason why the average age of farm workers has increased over the years. **(2 marks)**

(d) Outline THREE reasons why peasant (small) farmers tend to grow a variety of crops. **(6 marks)**

(e) Explain TWO ways in which climate influences wheat production on the prairies of Canada. **(4 marks)**

Total 24 marks

SECTION D (Human – Environment Systems)

Answer ONE question from this section.

8. Study Table 2 which shows natural disasters for the period 1947 – 80, and answer the questions which follow.

TABLE 2: NATURAL DISASTERS FOR 1947 – 80

Continental Area	Number of Lives Lost	Number of Disaster Events	Average Loss of Lives per Event
North America	11 531	358	32
Central America & the Caribbean	50 676	80	633
South America	49 265	75	657
Europe	26 694	119	224
Africa	25 540	34	751
Asia	1 054 090	437	2421
Australasia	4 502	16	282

(Source: Hewitt, K., 1997, Regions of risk: in Nagle, G., 1998:7)

(a) (i) Which area had FEWEST deaths from disasters? **(1 mark)**

(ii) What was the combined TOTAL loss of lives for Africa and Asia during the period? **(1 mark)**

(iii) What is the difference in the relationship between number of disasters and number of lives lost in Europe and Africa? **(2 marks)**

(b) (i) Define the term 'natural hazard'. **(2 marks)**

(ii) Describe THREE impacts of any ONE of the following hazards:

– Earthquakes
– Volcanoes
– Hurricanes **(6 marks)**

(c) (i) Explain how TWO activities of a **named** natural disaster organization in a Caribbean country have contributed to improved response to hazards. **(6 marks)**

(ii) Explain how THREE activities of the Caribbean Disaster Emergency Management Agency (CDEMA) (formerly known as CDERA) can reduce the impact of natural hazards in the Caribbean. **(6 marks)**

Total 24 marks

9. (a) A map of the Caribbean (Figure 5) **is provided as an insert**.

Study Figure 5 which shows some sites of earthquake activity and volcanic activity in the Caribbean. In your answer booklet, name FOUR of the countries lettered A, B, C, D, E, and F. **(4 marks)**

(b) (i) Define EACH of the following terms:

a) 'Water pollution' **(2 marks)**

b) 'Deforestation' **(2 marks)**

(ii) a) Identify TWO ways by which the atmosphere can be polluted **(2 marks)**

b) Identify ONE source for EACH of the ways identified in (ii) a) above. **(2 marks)**

(c) (i) Explain THREE causes of global warming **(6 marks)**

(ii) Discuss TWO likely consequences of global warming on the marine environment of the Caribbean. **(6 marks)**

Total 24 marks

10. (a) Table 3 shows the area deforested in the Amazon for the years 2004 – 2007.

TABLE 3: AREA OF DEFORESTATION IN THE AMAZON, BRAZIL, 2004 – 2007

Year	Area Deforested (km^2)
2004	27 423
2005	18 846
2006	14 109
2007	11 532

(Source: www.mongabay.com/brazil.html, 23 October 2008)

On the grid provided, as an insert, construct a bar graph to illustrate the above data. **Include a title.** **(4 marks)**

(b) Describe TWO forms of pollution produced through agriculture OR agro-industries. **(4 marks)**

(c) State FOUR specific measures used by **individuals** in the Caribbean to reduce land pollution. **(4 marks)**

(d) Explain how FOUR measures reduce the impact of deforestation, giving specific examples from Caribbean countries. **(12 marks)**

Total 24 marks

END OF TEST

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Insert for Question 1 (e)

Centre Number .....

Candidate's Number.....

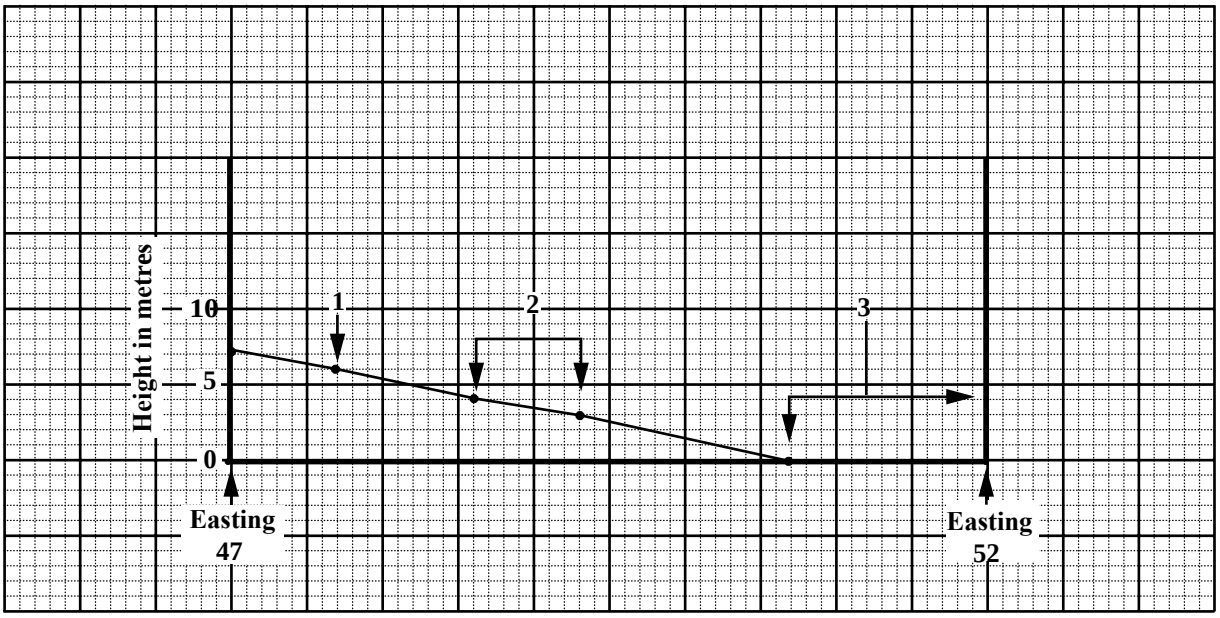


Figure 1. Profile along Northing 29 between Eastings 47 and 52

Key 1 – _____

Key 2 – _____

Key 3 – _____

TO BE ATTACHED TO YOUR ANSWER BOOKLET

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GEOGRAPHY

Paper 02 – General Proficiency

Insert for Question 1 (g)

Centre Number.....

Candidate's Number.....

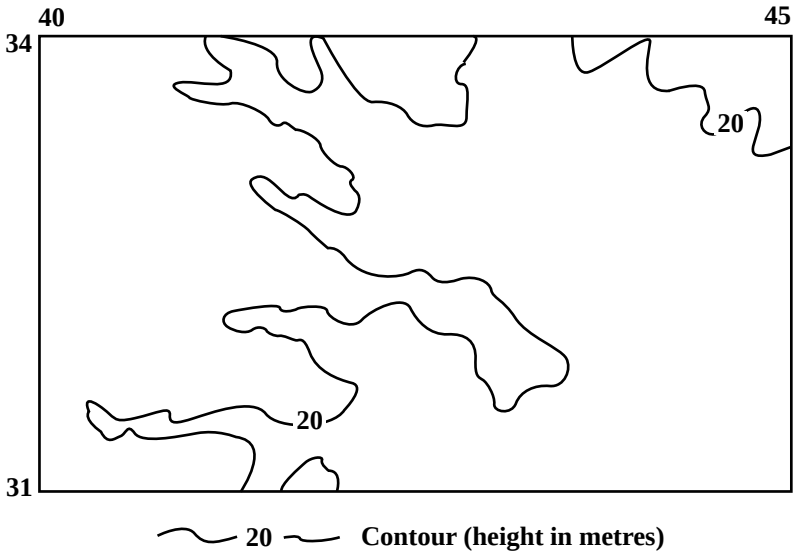


Figure 2. Map extract showing contours between Eastings 40 and 45 and Northings 31 and 34

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Paper 02 – General Proficiency

Insert for Question 4 (a)

Centre Number.....

Candidate's Number.....

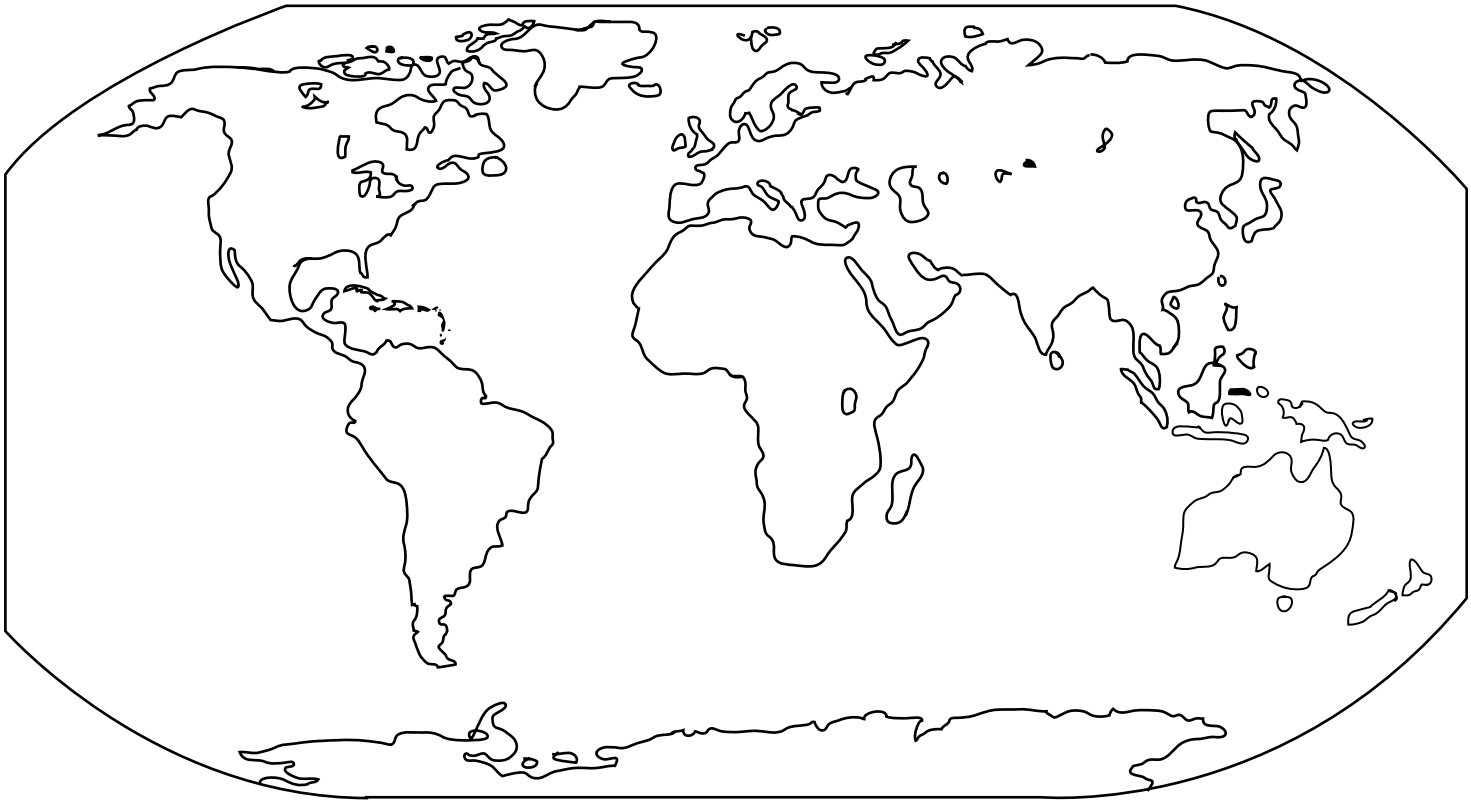


Figure 3. Map of the world

TO BE ATTACHED TO YOUR ANSWER BOOKLET

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Paper 02 – General Proficiency

Insert for Question 9 (a)

Centre Number .....

Candidate's Number .....

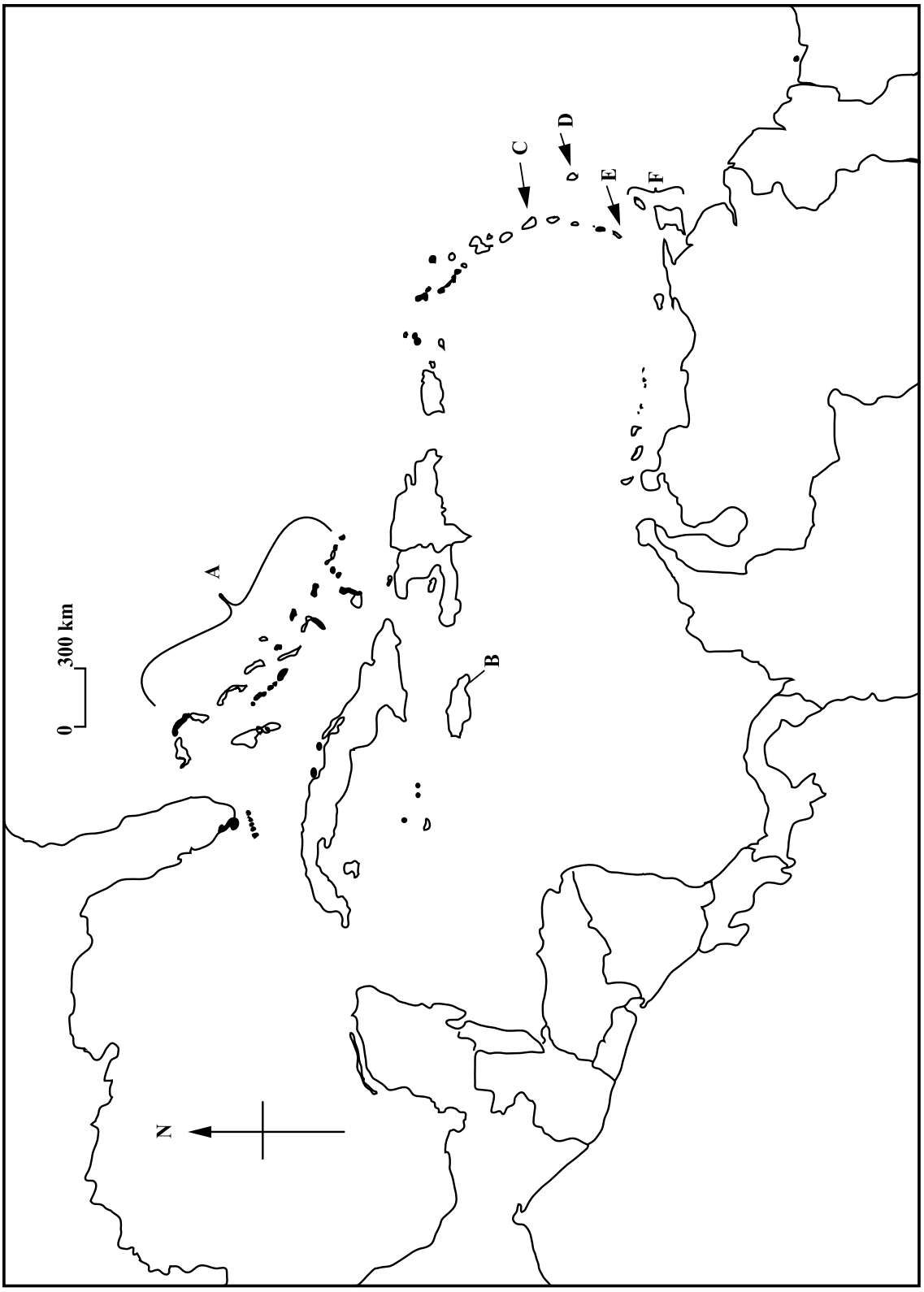


Figure 5. Map of the Caribbean

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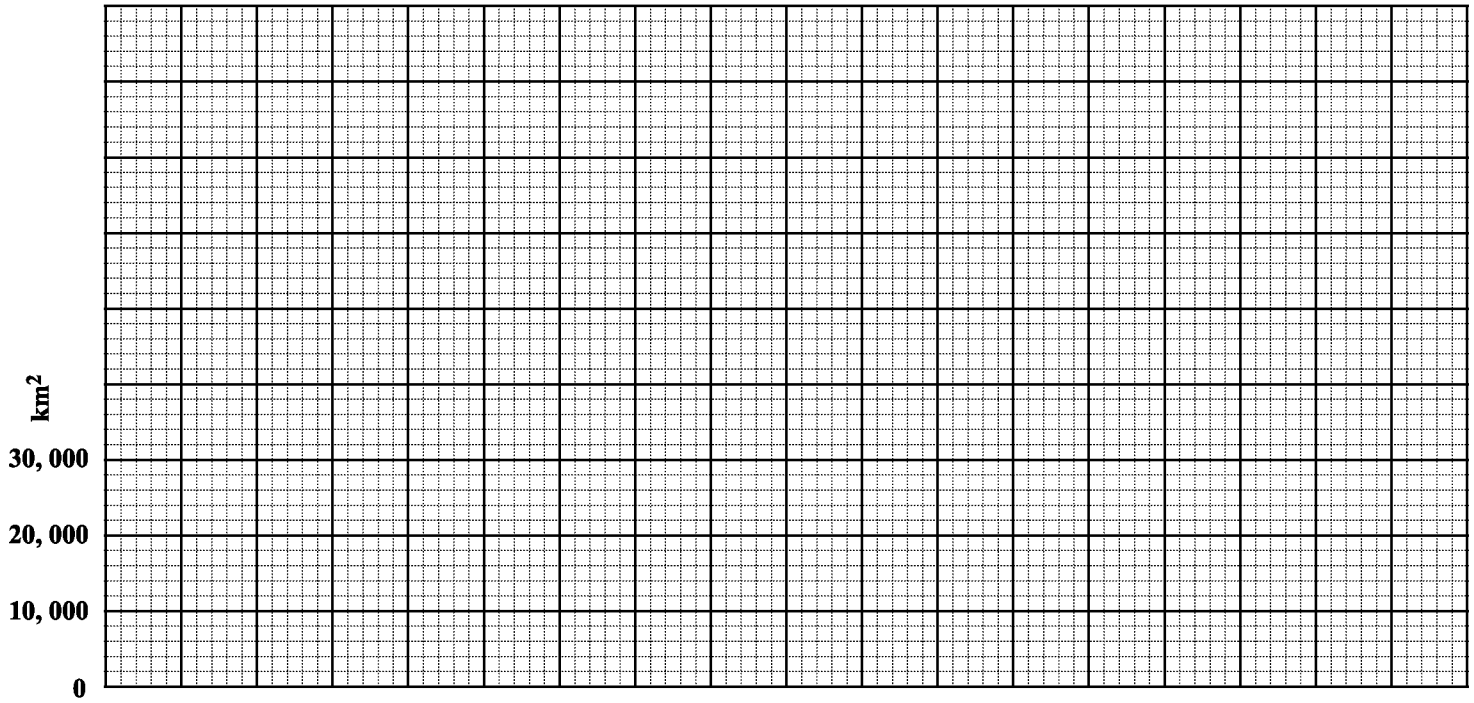
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Paper 02 – General Proficiency

Insert for Question 10 (a)

Centre Number .....

Candidate's Number .....

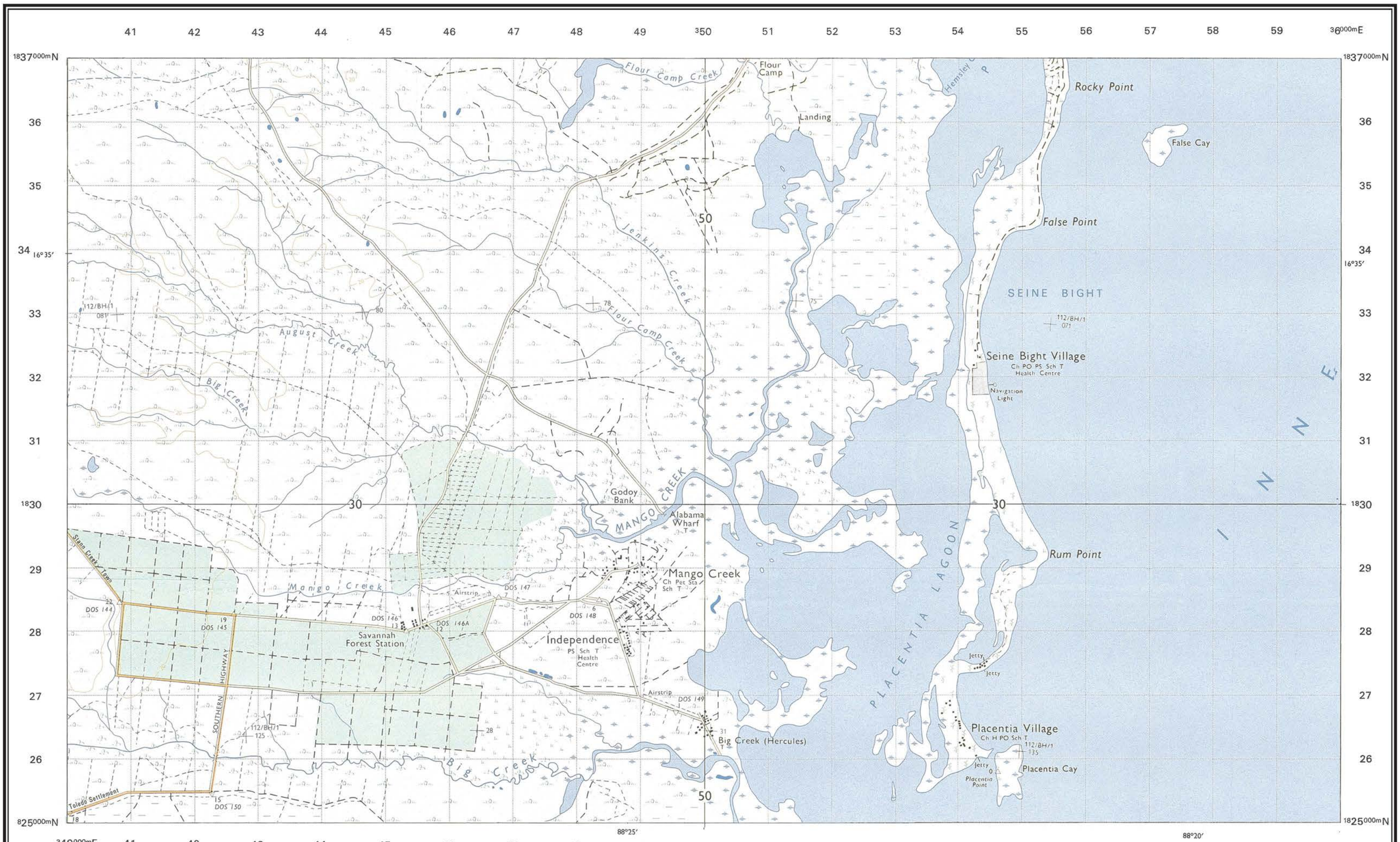


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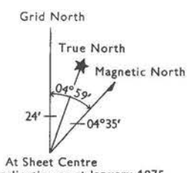
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SCALE 1:50,000

BELIZE - Mango Creek



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Extract Produced 1996
Made by Ordnance Survey



At Sheet Centre
Magnetic Declination as at January 1975
Annual Change :- 7′ West

Grid :-	U.T.M. Zone 16
Projection :-	Transverse Mercator
Spheroid :-	Clarke 1866
Unit of Measurement :-	Metre
Meridian of Origin :-	87° West of Greenwich
Latitude of Origin :-	Equator
Scale Factor at Origin :-	0·9996
False Co-ords of Origin :-	500,000m Easting Nil Northing
Datum :-	1927 N. American

The underwater features depicted on this map should not be relied upon for the purposes of marine navigation

IN AREAS OF HIGH VEGETATION THE ACCURACY OF CONTOURS RELATIVE TO THE UNDERLYING GROUND SURFACE CANNOT BE GUARANTEED

THE DELINEATION OF INTERNATIONAL AND OTHER BOUNDARIES ON THIS MAP MUST NOT BE CONSIDERED AUTHORITATIVE

SCALE 1:50,000

METRES 1000 0 1 2 3 4 5 6 7 8 KILOMETRES
MILE 1 0 1 2 3 4 5 6 MILES
FEET 5000 2500 0 5000 10000 15000 20000 25000 30000 FEET

HEIGHTS IN METRES

Town or area with permanent buildings
Other populated area
Village, Bank, Camp
Major Road — Bridge
Secondary Road — Culvert
Major Track (Generally motorable during dry season)
Minor Track, Footpath
Trigonometrical Station :- Major
" " " and Lighthouse
" " Minor
Spot Height (in Metres) ·284

Boundary :- International +++++++
" District + − + − + − +
Boundary Cairn, Boundary Pillar ▲BC ▲BP
Contours (V.I. 20metres) Depression 200 180 160
Sand or Mud
Sink Hole
Watercourse, Waterfall, Rapids, Dam
" (Wide), Waterfall, Rapids
" (Indefinite), Drain Dr
Water Tank, Well or Waterhole ▪ WTk OW
Coral
Cliff, Quarry
Rock
Air Photo Principal Point with Film No 125/BH/10 033

Rain Forest
Broken or Light Forest
Thicket
Scrub
Savannah
Wet Savannah
Marsh and Swamp (including Mangrove)
Cultivation :- Scattered or Shifting
" Permanent

ABBREVIATIONS

Cathedral	Cath	Hotel	H
Court House	Ct H	Petrol Station	Pet Sta
Church	Ch	Post Office	PO
Dispensary	Disp	Police Station	PS
District Office	DO	School	Sch
Hospital	Hosp	Telephone	T

CONVERSION TABLE

Metres	Feet
1600	5000
1500	4500
1400	4000
1300	3500
1200	3000
1100	2500
1000	2000
900	1500
800	1000
700	500
600	
500	
400	
300	
200	
100	
0	0