Write your name here

Surname	Other names

Pearson Edexcel
Level 1/Level 2 GCSE (9–1)

Centre Number | Candidate Number

Geography A

Paper 2: The Human Environment

Tuesday 5 June 2018 – Afternoon
Time: 1 hour 30 minutes

Paper Reference
1GA0/02

You must have:
Resource Booklet (enclosed)
Ordnance Survey Map Extract (enclosed), calculator

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- In Section A and Section B answer **all** questions.
- In Section C answer **all** of Question 3 and **one** question from **either** Question 4 **or** Question 5.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- Where asked you must **show all your working out** with **your answer clearly identified** at the **end of your solution**.

Information

- The total mark for this paper is 94.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*
- The marks available for spelling, punctuation, grammar and use of specialist terminology are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ▶

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SECTION A

Changing Cities

Answer ALL questions in this section.
Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 The functions and structure of cities vary across the UK.

(a) Study the Ordnance Survey (OS) map extract.

(i) Name the suburb of Bradford located in grid square 1736.

(1)

☐ **A** Allerton

☐ **B** Eccleshill

☐ **C** Bowling

☐ **D** Undercliffe

(ii) Identify the settlement pattern for the suburb of Cottingley, located in grid square 1137.

(1)

☐ **A** linear

☐ **B** dispersed

☐ **C** gridiron

☐ **D** nucleated

(iii) Identify the land use at grid reference 201360.

(1)

.....

(iv) Identify **two** pieces of evidence from grid squares 1632 and 1633 to show that this area is Bradford's Central Business District (CBD).

(2)

1 .....

.....

2 .....

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(b) Recent changes in retailing have created challenges for many UK cities.

Study Figure 1a in the Resource Booklet.

(i) State **two** possible reasons why the Kingswood Shopping Centre was built here.

(2)

1 .....

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(ii) Suggest **one** impact of the Kingswood Shopping Centre on Hull's CBD.

(2)

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(c) Identify the meaning of the term **re-urbanisation**.

(1)

☒ **A** movement of people back towards a city centre to live

☒ **B** growth of a city into the countryside

☒ **C** decline and closure of industries in a city

☒ **D** redevelopment of brownfield sites to attract new businesses

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(d) Explain **two** causes of deindustrialisation in the UK.

(4)

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(e) Rapid urbanisation has taken place in many developing and emerging countries.

Study Figure 1b below.

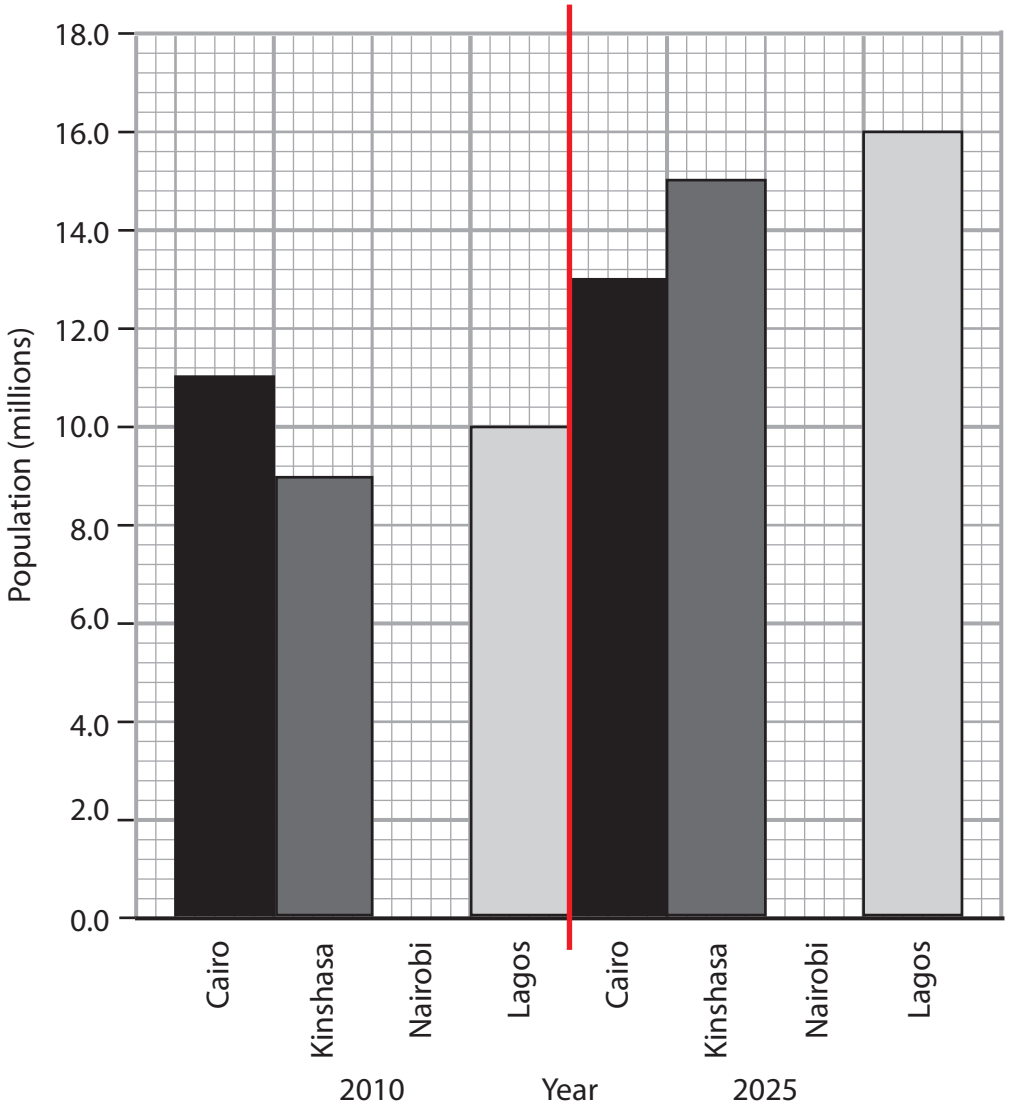

Figure 1b

Past and projected populations for selected cities in Africa

(i) Plot the data for Nairobi given in the table below by completing the bar chart on Figure 1b.

(2)

City	Population (millions)	
	2010	2025 (projected)
Nairobi	3.2	6.0

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(ii) Calculate the projected increase in Kinshasa's population between 2010 and 2025.

(1)

..... million

(iii) State **one** possible reason for the trend shown on Figure 1b.

(1)

.....

.....

(iv) Explain **two** negative impacts of rapid urbanisation on a city in a developing or emerging country.

(4)

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(f) You have studied a major city in **either** a developing **or** emerging country.

Evaluate the ways that the challenges of rapid urbanisation have been managed to improve the quality of life.

(8)

Named major city in a developing or emerging country .....

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(Total for Question 1 = 30 marks)

TOTAL FOR SECTION A = 30 MARKS

SECTION B

Global Development

Answer ALL questions in this section.
Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

2 Levels of development are different around the world due to a combination of physical and human factors.

(a) Name **one** indicator used in the calculation of the Human Development Index (HDI).

(1)

.....

(b) Study Figure 2a in the Resource Booklet.

(i) Identify **one** country labelled on Figure 2a with a medium HDI.

(1)

☐ **A** USA

☐ **B** India

☐ **C** Madagascar

☐ **D** Brazil

(ii) Identify the continent on Figure 2a that has the highest number of countries with a very high HDI.

(1)

.....

(iii) State **two** disadvantages of the method of presentation shown on Figure 2a.

(2)

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(c) State **one** physical factor that has led to variations in the level of development across the UK.

(1)

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(d) Study Figure 2b in the Resource Booklet.

(i) Identify the **two** countries with the highest GDP per capita.

(1)

☒ **A** Morocco and Kenya

☒ **B** France and Qatar

☒ **C** Qatar and Spain

☒ **D** Kenya and Thailand

(ii) Calculate the median GDP per capita for the countries shown on Figure 2b.

(1)

..... US$

(iii) Explain **two** reasons why GDP per capita is often lower in the periphery regions of a country.

(4)

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(e) Changes in population structure over the last 30 years have influenced the development of developing and emerging countries.

Study Figure 2c below.

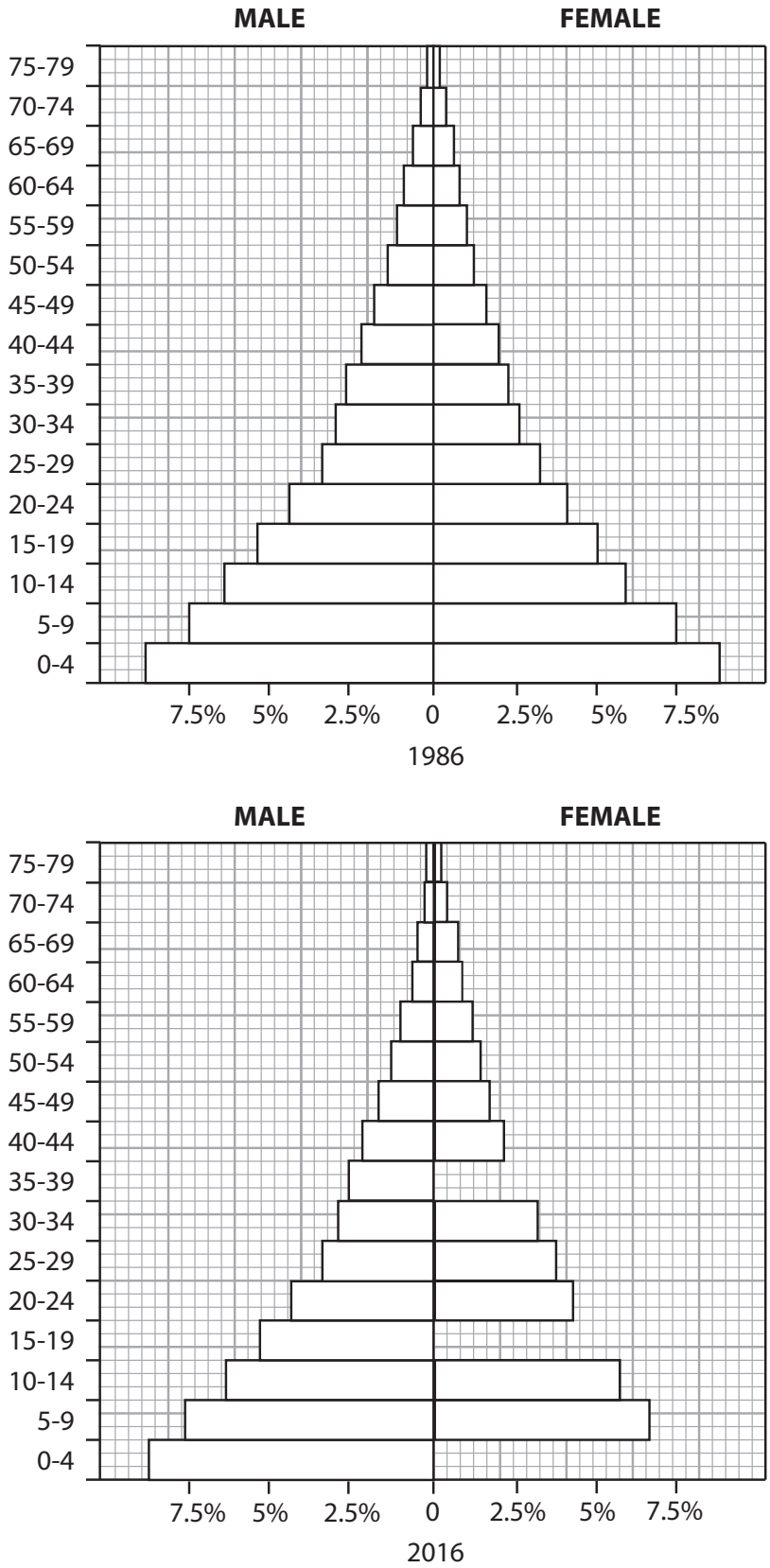

Figure 2c

Population pyramids for Ghana, a developing country, 1986 and 2016

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(i) Plot the data below to complete the 2016 population pyramid on Figure 2c.

(3)

Age group (female)	Percentage (%) population
0–4	7.5
15-19	5.0
35-39	2.5

(ii) Identify the total percentage of 5-9 year olds in 1986.

(1)

☒ **A** 7.5%

☒ **B** 10%

☒ **C** 12.5%

☒ **D** 15%

(iii) State **two** possible reasons for the decrease in the 0–4 age group shown on Figure 2c.

(2)

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(f) Explain **two** ways geopolitical relationships have affected the development of **either** a named developing **or** emerging country.

(4)

Named developing or emerging country .....

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(g) Assess the positive and negative impacts of rapid development on **either** a named developing **or** emerging country.

(8)

Named developing or emerging country .....

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(Total for Question 2 = 30 marks)

TOTAL FOR SECTION B = 30 MARKS

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SECTION C

Resource Management

Answer ALL parts of question 3. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

3 People exploit and can change environments in order to obtain natural resources.

(a) Define the term **renewable resource**.

(1)

.....

.....

(b) Study Figure 3 in the Resource Booklet.

(i) Identify the amount of forest cover in 2020 if the trend shown on Figure 3 continues.

(1)

☐ **A** 51%

☐ **B** 53%

☐ **C** 55%

☐ **D** 57%

(ii) Calculate the mean amount of forest cover shown on Figure 3.

Answer to one decimal place.

You must show your workings in the space below.

(2)

..... %

(iii) Name **one** type of graph that could be used to present the data shown on Figure 3.

(1)

.....

(iv) State **one** possible reason for the trend shown on Figure 3.

(1)

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(v) Explain **two** ways in which the trend shown on Figure 3 could impact on the environment.

(4)

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(Total for Question 3 = 10 marks)

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Answer EITHER Question 4 OR Question 5

Energy Resource Management

Spelling, punctuation, grammar and use of specialist terminology will be assessed in Question 4(f).

If you answer Question 4 put a cross in the box ☒ .

4 The increasing demand for energy is being met by different types of energy resource.

(a) Identify the meaning of the term **carbon footprint**.

(1)

☒ **A** a measure of all the different energy resources in a country

☒ **B** a measure of the impact of humans on the environment

☒ **C** a measure of the amount of energy produced and consumed

☒ **D** a measure of all the greenhouse gases an individual produces

(b) Natural gas is a non-renewable energy resource.

State **one** other non-renewable energy resource.

(1)

.....

(c) Study Figure 4 in the Resource Booklet.

(i) Identify the increase in Africa's percentage of natural gas production from 1970 to 2015.

(1)

☒ **A** 3.5%

☒ **B** 5.5%

☒ **C** 7.5%

☒ **D** 9.5%

(ii) Identify the region with the smallest percentage change in natural gas production between 1970 and 2015.

(1)

.....

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(iii) State **two** possible reasons for the change in the Middle East's natural gas production shown on Figure 4.

(2)

1 .....

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2 .....

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(d) Explain **one** disadvantage of fracking.

(2)

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(e) Explain **one** way a named developed country has attempted to manage its energy resources in a sustainable way.

(4)

Named developed country .....

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In this question, up to four additional marks will be awarded for your spelling, punctuation, grammar and use of specialist terminology.

(f) Assess the reasons why the UK and other countries use a mix of different energy resources.

(8)

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(Spelling, punctuation, grammar and use of specialist terminology = 4 marks)

(Total for Question 4 = 24 marks)

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Do not answer Question 5 if you have answered Question 4.

Water Resource Management

Spelling, punctuation, grammar and use of specialist terminology will be assessed in Question 5(f).

If you answer Question 5 put a cross in the box ☒ .

5 Areas around the world have challenges in managing their water resources.

(a) Identify the meaning of the term **water surplus**.

(1)

☒ **A** the supply of useable water is greater than its demand

☒ **B** the amount of rainfall is lower than the amount of evaporation

☒ **C** the water quality has declined due to pollution from industry

☒ **D** the supply of useable water is lower than the demand

(b) State **one** reason why some areas have water supply problems.

(1)

.....

(c) Study Figure 5 in the Resource Booklet.

Water stress can be measured using the Water Exploitation Index (WEI).

(i) Identify the decrease in the Humber area's WEI.

(1)

☒ **A** 2%

☒ **B** 4%

☒ **C** 6%

☒ **D** 8%

(ii) Identify the area with the smallest change in WEI between summer 2002 and summer 2012.

(1)

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(iii) State **two** possible reasons for the change in the North Eastern area's WEI shown on Figure 5.

(2)

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(d) Explain **one** disadvantage of desalination.

(2)

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(e) Explain **one** way a named developed country has attempted to manage its water resources in a sustainable way.

(4)

Named developed country .....

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In this question, up to four additional marks will be awarded for your spelling, punctuation, grammar and use of specialist terminology.

(f) Assess the reasons why there are differences in water consumption between a developed country and **either** an emerging **or** a developing country.

(8)

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(Spelling, punctuation, grammar and use of specialist terminology = 4 marks)

(Total for Question 5 = 24 marks)

TOTAL FOR SECTION C = 34 MARKS
TOTAL FOR PAPER = 94 MARKS

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Figure 1b © UN Department of Economics and Social Affairs and Frost and Sullivan Analysis

Figure 2c http://populationpyramid.net/ghana/2016/

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Ordnance Survey

1:50 000 Scale
Landranger Series

Leeds & Bradford

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Extract No 2270/104

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Four colours should appear above; if not then please return to the invigilator.

ROADS AND PATHS

Not necessarily rights of way

Junction number
Service area — Elevated
M1 — Motorway (dual carriageway)
Unfenced
A 470 — Dual carriageway — Primary Route (A network of recommended through routes which complement the motorway system)
A 493 — Footbridge — Main road
Road under construction
B 4518 — Secondary road
A 855 — Bridge — B 885 — Narrow road with passing places
Road generally more than 4m wide
Road generally less than 4m wide
Path / Other road, drive or track
Gradient: steeper than 20% (1 in 5), 14% to 20% (1 in 7 to 1 in 5)
Gates, Road tunnel
Ferry P — Ferry V — Ferry (passenger), Ferry (vehicle)

RAILWAYS

Track multiple or single
Track under construction
Siding
Tunnel, cuttings
Narrow gauge, tramway or light rail system
Bridges, footbridge
LC — Level crossing
Viaduct, embankment
a — Station, (a) principal
Light rail station

WATER FEATURES

Marsh or salting
Towpath
Lock
Slopes
Cliff
Shingle
Aqueduct
Canal
Ford
Beacon
Flat rock
Lighthouse (in use)
Lighthouse (disused)
Weir
Normal tidal limit
Sand Dunes
Low water mark
Lake
Footbridge
Bridge
Mud
High water mark
Canal (dry)

HEIGHTS

1 metre = 3·2808 feet

50 — Contours are at 10 metres vertical interval

·144 — Heights are to the nearest metre above mean sea level

Where two heights are shown, the first is the height of the natural ground in the location of the triangulation pillar, and the second (in brackets) to a separate point which is the natural summit.

ROCK FEATURES

Outcrop
Cliff
650
600
Scree

PUBLIC RIGHTS OF WAY

Footpath
Bridleway
Restricted byway (not for use by mechanically propelled vehicles)
Byway open to all traffic

The symbols show the defined route so far as the scale of mapping will allow.

The representation on this map of any other road, track or path is no evidence of the existence of a right of way. Not shown on maps of Scotland

Danger Area — Firing and Test Ranges in the area. Danger! Observe warning notices.

OTHER PUBLIC ACCESS

Other route with public access (not normally shown in urban areas). Alignments are based on the best information available. These routes are not shown on maps of Scotland.

On-road cycle route

Traffic-free cycle route

4 — National Cycle Network number

8 — Regional Cycle Network number

National Trail, Scotland's Great Trails, European Long Distance Path and selected Recreational Routes

BOUNDARIES

National

District

County, Unitary Authority, Metropolitan District or London Borough

National Park

ANTIQUITIES

Site of antiquity

Site of Battle (with date)

Visible earthwork

VILLA — Roman

Castle — Non-Roman

TOURIST INFORMATION

Camp site / caravan site

Garden / arboretum

Golf course or links

Information centre (all year / seasonal)

Nature reserve

P — Parking, Park and ride (all year / seasonal)

Picnic site

Recreation / leisure / sports centre

Selected places of tourist interest

Phone, public / emergency

Viewpoint

V — Visitor centre

Walks / Trails

World Heritage site or area

Youth hostel

LAND FEATURES

Electricity transmission line (pylons shown at standard spacing)

Pipe line (arrow indicates direction of flow)

ruin — Buildings

Important building (selected)

Bus or coach station

Current or former place of worship — with tower; with spire, minaret or dome

Place of worship

Glass structure

H — Heliport

Triangulation pillar

Mast

Wind pump

Wind turbine

Windmill with or without sails

Graticule intersection at 5′ intervals

Cutting, embankment

Landfill site or slag/spoil heap

Coniferous wood

Non-coniferous wood

Mixed wood

Orchard

Park or ornamental ground

Forestry Commission land

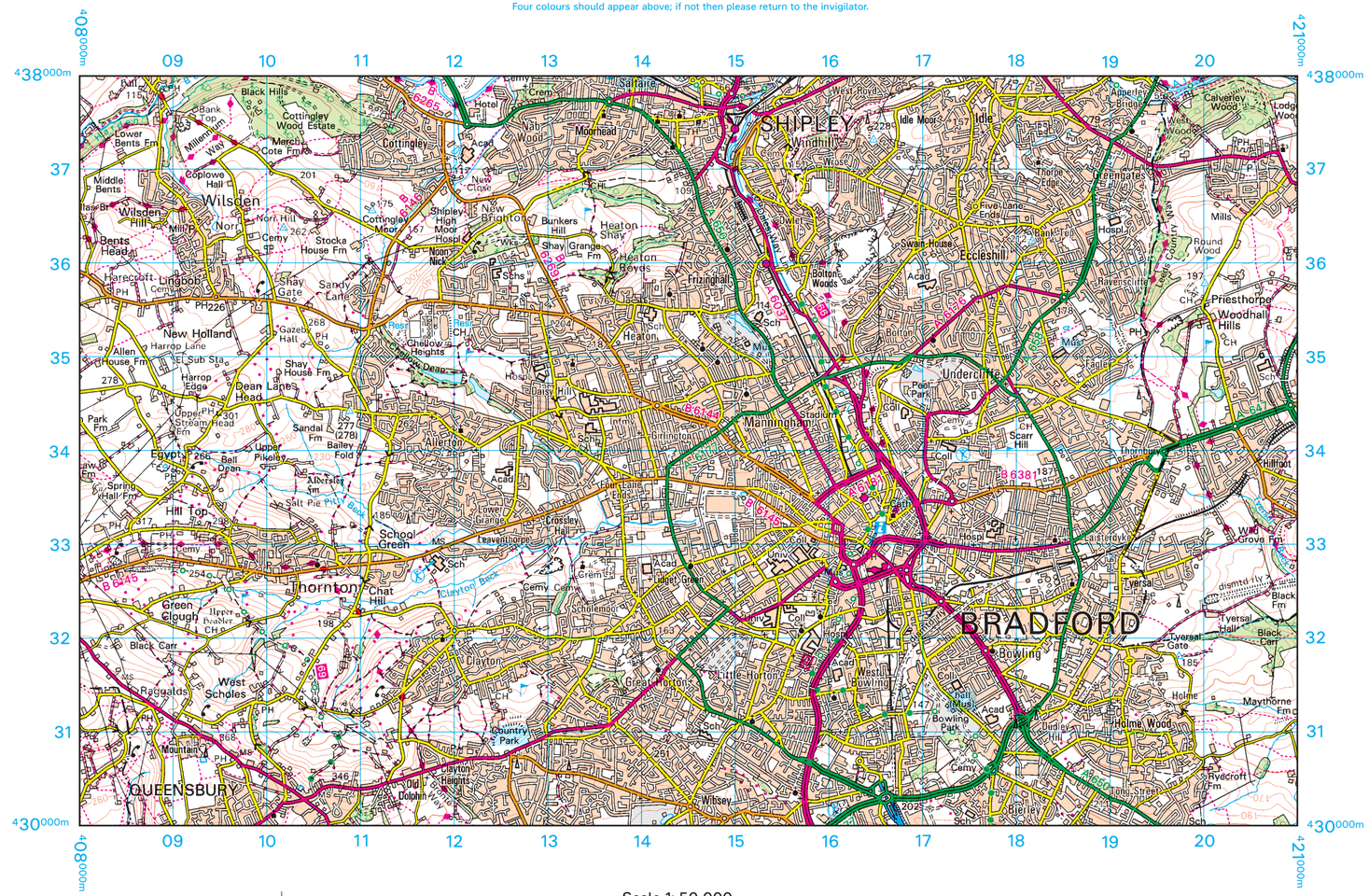
National Trust (always open / limited access, observe local signs)

Natural Resources Wales

National Trust for Scotland (always open / limited access, observe local signs)

ABBREVIATIONS

Br	Bridge	MS	Milestone
Cemy	Cemetery	Mus	Museum
CG	Cattle grid	P	Post office
CH	Clubhouse	PC	Public convenience (in rural areas)
Fm	Farm	PH	Public house
Hospl	Hospital	Sch	School
Ho	House	TH	Town Hall, Guildhall or equivalent
MP	Milepost	Univ	University


SHIPLEY
BRADFORD
QUEENSBURY
Wilsden
Thornton
Eccleshill
Manningham
Allerton
Heaton
Frizinghall
Bowling
Bierley
Wibsey
Priestthorpe
Woodhall Hills
Holme Wood
Maythorne Fm
Rivcroft Fm
Black Fm
Tyersal Gate
Tyersal Hall
Black Carr
Hillfoot
Wild Grove Fm
Round Wood
Mills
Calverley Wood
Lodge Wood
Apperley Bridge
West Wood
Idle
Idle Moor
Windhill
Undercliffe
Scarr Hill
Bolton Woods
Bolton
Heaton Shay
Bunkers Hill
Shipley High Moor
New Brighton
Cottingley
Cottingley Wood Estate
Cottingley Moor
Moorhead
Saltaire
Hill Top
Green Clough
Black Carr
Raggalds
West Scholes
Clayton
Little Horton
Great Horton
Clayton Heights
Old Dolphin
Country Park
Chat Hill
School Green
Crossley Hall
Leaventhorpe
Bell Dean
Upper Pikeley
Bailey Fold
Sandal Fm
Salt Pie Hill
Dean Head
Dean Lane
Harrop Edge
Harrop Lane
New Holland
Lingbob
Harecroft
Bents Head
Wilsden Hills
Middle Bents
Lower Bents Fm
Coplowe Hall
Millennium Way
Bank Top
Black Hills
Merch Cote Fm
Stocka House Fm
Shay Gate
Sandy Lane
Gazeb Hall
Shay House Fm
Allen House Fm
Spring Hall Fm
Egypt
Upper Stream Head
Park Fm
Chellow Heights
Daisy Hill
Hospl
Sch
Univ
Coll
Cemy
Acad
Mus
Ho
Hotel
Crem
Nab Wood
Nab Cliff
Hall Ings
Tyersal Lane
Tyersal Beck
Clayton Beck
Leeds Country Way
Bradford Beck
Bradford Canal
Leeds & Liverpool Canal
Bradford Ring Rd
Thornton Rd
Manchester Rd
Wakefield Rd
Leeds Rd
Keighley Rd
Otley Rd
Harrogate Rd
Thornton Lodge
Lower Grange
Upper Grange
Four Lane Ends
Five Lane Ends
Swan House
Thorpe Edge
Greenholmes
Ravenscliffe
Lapwing Lane
Bowling Park
Bowling Hall
Dudley Hill
Tong Street
Holme Wood
Lower Holme
Upper Holme
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Nab Wood
Nab Cliff
Hall Ings
Tyersal Lane
Tyersal Beck
Clayton Beck
Leeds Country Way
Bradford Beck
Bradford Canal
Leeds & Liverpool Canal
Bradford Ring Rd
Thornton Rd
Manchester Rd
Wakefield Rd
Leeds Rd
Keighley Rd
Otley Rd
Harrogate Rd
Thornton Lodge
Lower Grange
Upper Grange
Four Lane Ends
Five Lane Ends
Swan House
Thorpe Edge
Greenholmes
Ravenscliffe
Lapwing Lane
Bowling Park
Bowling Hall
Dudley Hill
Tong Street
Holme Wood
Lower Holme
Upper Holme
Lower Wibsey
Upper Wibsey
Bierley
B 6145
B 6144
B 6381
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B 6145
A 650
A 651
A 6177
A 658
A 6181
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A 6177
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Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Geography A

Paper 2: The Human Environment

Tuesday 5 June 2018 – Afternoon

Resource Booklet

Paper Reference

1GA0/02

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SECTION A

Figure 1a

The Kingswood Shopping Centre located on the edge of the city of Hull

SECTION B

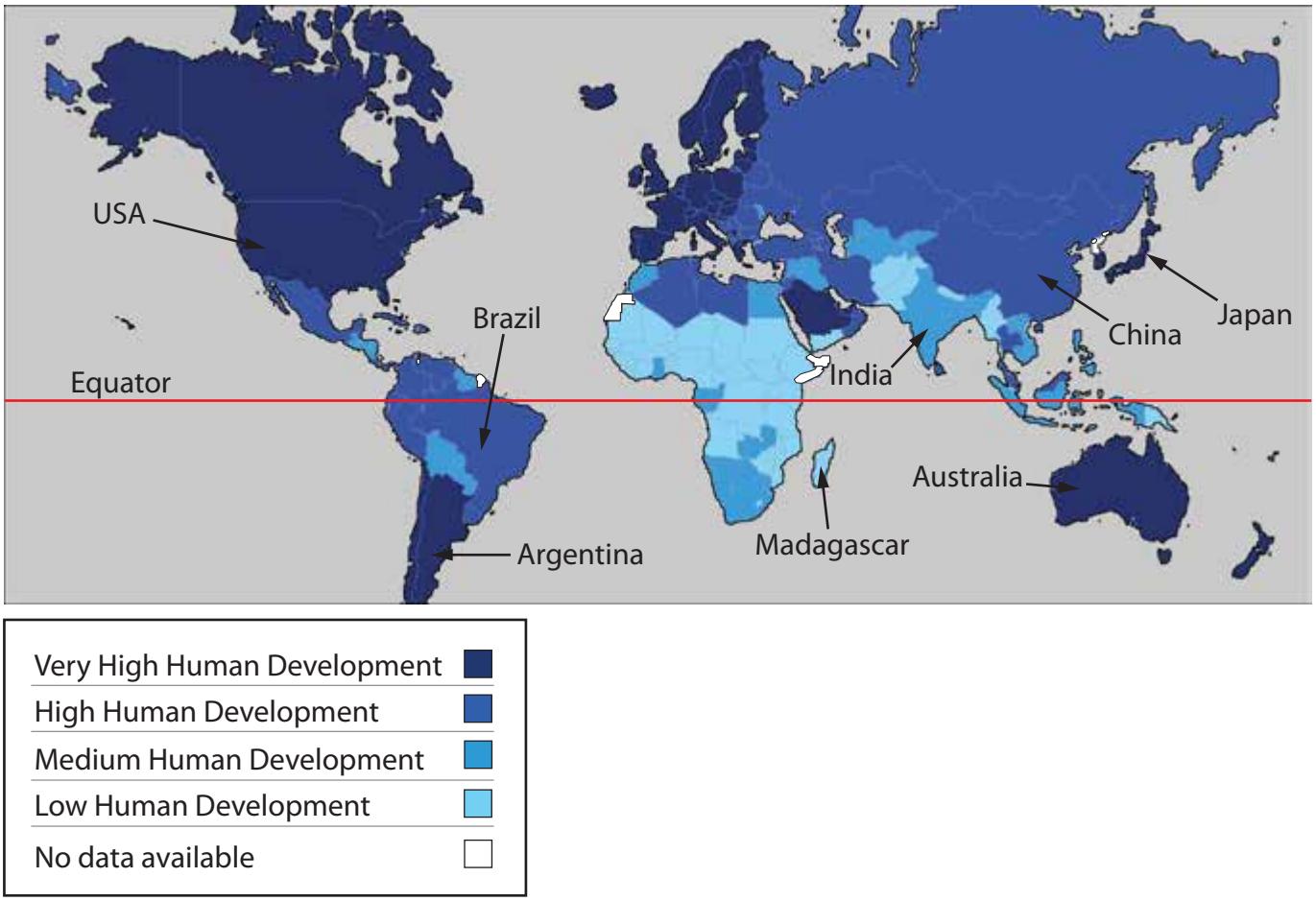


Figure 2a

Human Development Index (HDI), 2015

Country	GDP per capita (US$)
Botswana	6 361
France	36 248
Hungary	12 259
Kenya	1 377
Morocco	2 872
Qatar	74 667
Spain	25 832
Thailand	5 816
Uruguay	15 574

Figure 2b

Gross Domestic Product (GDP) per capita (US$) for selected countries, 2015

SECTION C

Year	Amount of forest cover in Tanzania (%)
1990	63
1995	61
2000	59
2005	57
2010	55
2015	53

Figure 3

Changes in the amount of forest cover in Tanzania, 1990–2015

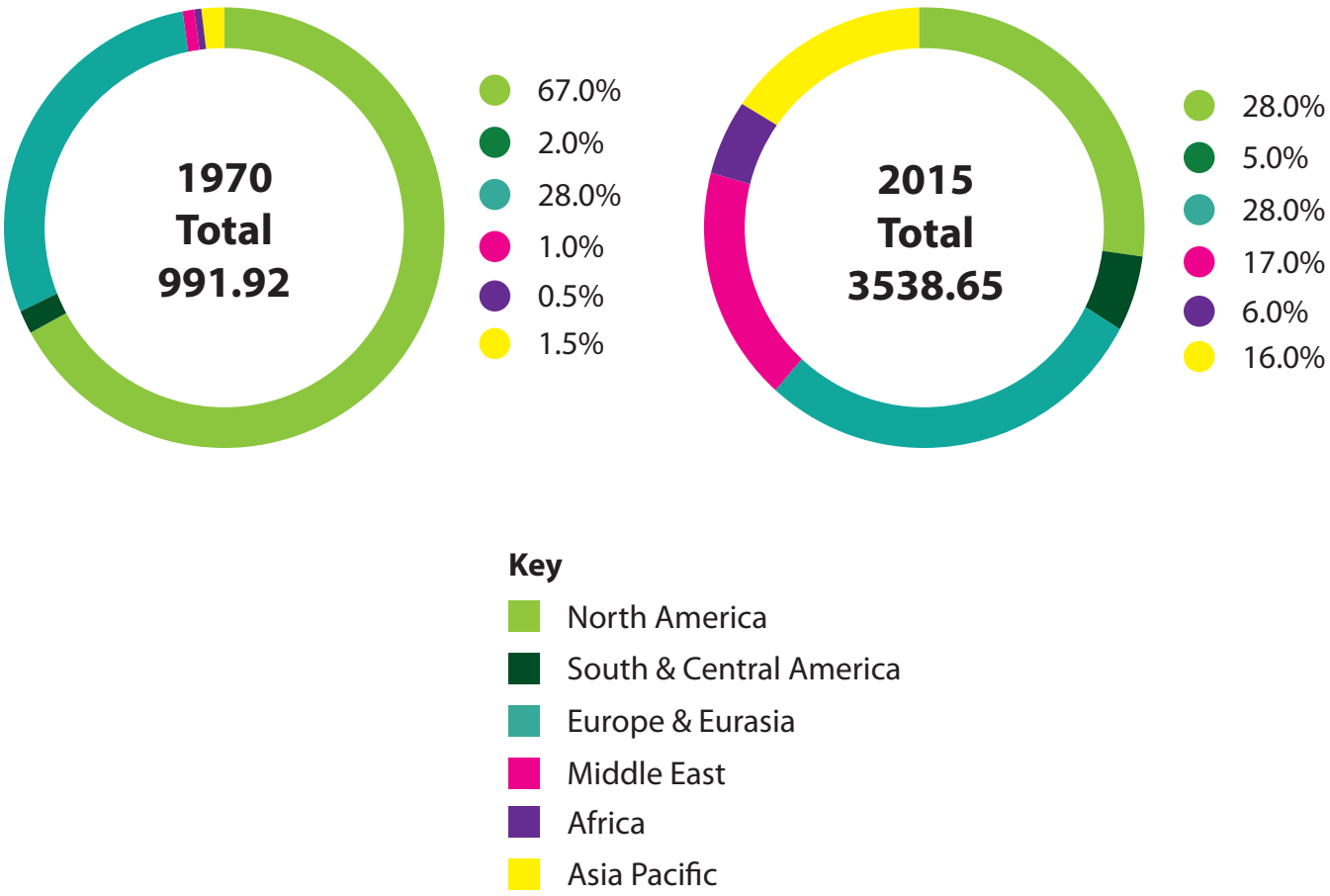
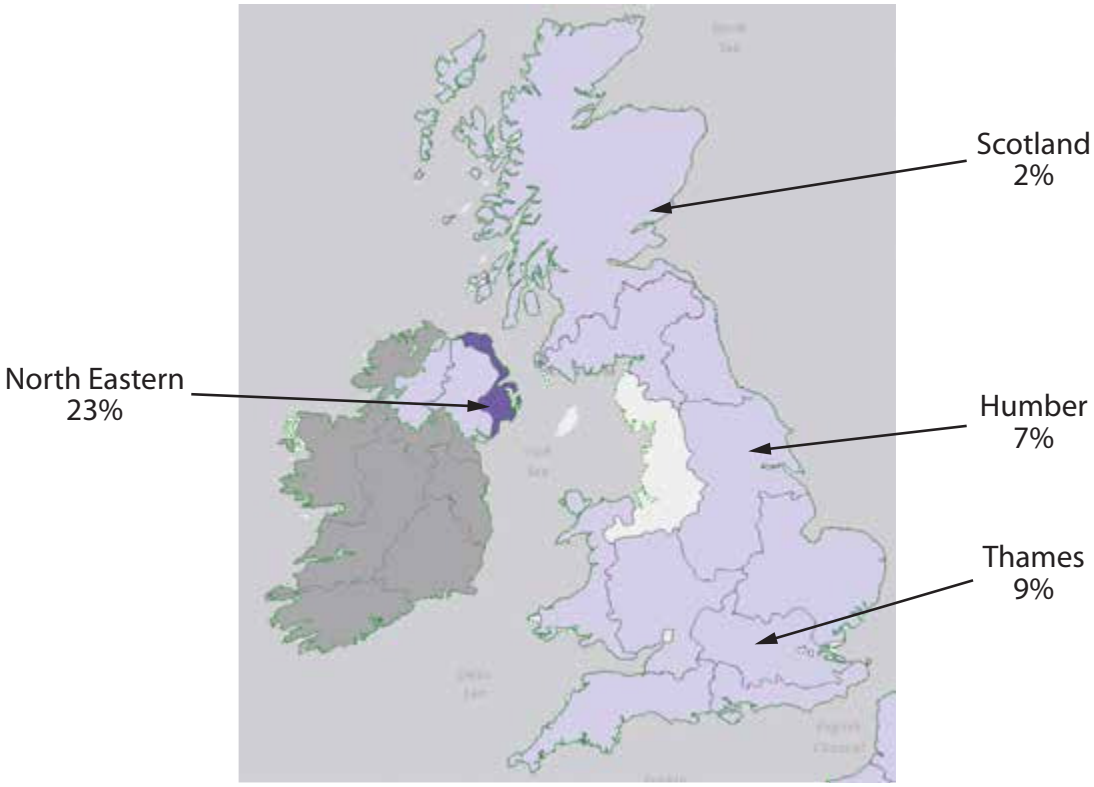


Figure 4

Natural gas production (billion cubic metres) in different regions of the world in 1970 and 2015

Summer 2002

Summer 2012



Key:

no data | 0-19% | 20-39% | 40% and over

Figure 5

Water Exploitation Index (WEI) for selected areas in the UK

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Figure 4 - http://tools.bp.com/energy-charting-tool.aspx#/st/natural_gas/dt/production/unit/BCM/region/NOA/SCA/EU/MIE/AFR/AP/view/pie/

Figure 5 - http://www.eea.europa.eu/data-and-maps/explore-interactive-maps/water-exploitation-index-for-river

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