

RIVER VALLEY HIGH SCHOOL
General Certificate of Education Advanced Level
Preliminary Examination II
Higher 1

GEOGRAPHY
Paper 1

8812/01
16 September 2015
3 hours

Additional Materials: Writing Paper
 1 Insert
 World outline map
 Cover Page

READ THESE INSTRUCTIONS FIRST

Write your name, admission number and class on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs, or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A

- Answer **four** questions

Section B

- Answer **one** question.

Section C

- Answer **one** question.

You are advised not to spend more than one hour 30 minutes on Section A.
The Insert contains all the Figures and the Photographs referred to in the questions.
You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically required by the question.
Diagrams and sketch maps should be drawn whenever they serve to illustrate an answer.
The World outline map may be annotated and handed in with relevant answers.
You are reminded of the need for good English and clear presentation in your answers.

At the end of the examination, fasten all your work below the cover page securely together.
The number of marks is given in brackets [] at the end of each question or part question.

This document consists of 6 printed pages, 2 blank pages and 1 Insert.



[Turn over

Section A

Answer **four** questions from this section.

Lithospheric Processes, Hazards and Management

- 1 Fig. 1A shows the geochronology of the Hawaiian Ridge-Emperor Seamount chain. Fig. 1B shows the age of the ocean floor of the Pacific, Atlantic and a part of the Southern Oceans.
 - (a) With reference to Fig. 1A, describe the spatial arrangement of the Hawaiian Ridge-Emperor Seamount chain. [2]
 - (b) With the aid of a diagram, account for the arrangement of the Hawaiian Ridge-Emperor Seamount chain. [5]
 - (c) With reference to Fig. 1B, explain how the area marked 'X' provides evidence for the plate tectonics theory. [5]

Globalisation of Economic Activity

- 2 Fig. 2A shows the cost of one month of broadband subscription in 2011 in USD. Fig. 2B shows the cost of one month of broadband subscription in USD from 2008-2011. Photograph A shows Somali migrants crowd the night shore of the Red Sea at Djibouti City, Djibouti, trying to capture cell signals from neighbouring Somalia in order to connect with relatives back home and further abroad.
 - (a) Define the terms '*shrinking world*', '*technological change*' and '*information and communications technology*' (ICT). [3]
 - (b) Study Fig. 2A, describe the regional distribution of monthly broadband subscription costs in 2011. [4]
 - (c) With reference to Figs. 2A, 2B and Photograph A, discuss the extent communications technology has caused the shrinkage of distance in Africa. [5]

Hydrologic Processes, Hazards and Management

- 3 EITHER** Photograph B shows an upper course section of the Taku River in Alaska, USA.
- (a)** With the aid of a well-annotated cross sectional diagram, outline the key features of the river along transect AB. [3]
 - (b)** Citing evidence from Photograph B, explain and account for the channel morphology of this section of the Taku River. [5]
 - (c)** Explain how the morphology and energy of this river will change as it flows downstream. [4]

Urban Issues and Challenges

- 3 OR** Photographs C and D show part of the Central Business District (CBD) of a city in a Developed Country (DC) which has recently undergone urban renewal and the re-introduction of railed public transport.
- (a)** Identify the features in the photographs which show that urban renewal has taken place. [4]
 - (b)** Suggest how the urban renewal shown in the photographs might encourage people back to the CBD. [4]
 - (c)** Briefly describe how you would undertake, in a single day, an accurate survey of pedestrian flows in a CBD such as that shown in the photographs. [4]

Lithospheric Processes, Hazards and Management and Hydrologic Processes, Hazards and Management

- 4 EITHER** Fig. 3A shows the mean monthly variation in discharge at three gauging stations along River Zambezi in Africa. Fig. 3B shows a climate graph for the area.
- (a)** Describe the main change(s) in discharge along River Zambezi. [2]
 - (b)** Using evidence from Fig. 3A and Fig. 3B, suggest possible reasons for the variations in discharge at each of the sites X, Y and Z on River Zambezi. [6]
 - (c)** Discuss how you would study the rocks in a local area to determine their types. [6]

The Globalisation of Economic Activity and Urban Issues and Challenges

- 4 OR** Fig. 4A shows the urban development plan for the city of Shanghai for the period between 1999 and 2020. Fig. 4B shows details of the urban plan for Songjiang new town for the period between 1999 and 2020. Fig. 4C shows the population developments in Shanghai between 2000 and 2010.
- (a)** With reference to Figs. 4A and 4B, describe the urban development plan of the city of Shanghai. [4]
 - (b)** Citing evidence from Figs. 4A, 4B and 4C, suggest reasons for the urban development plans of the city of Shanghai in this time period. [4]
 - (c)** With reference to Fig. 4B, discuss how the functional zoning and location of Songjiang new town is a response to the global shift in services. [6]

Section B: Physical Geography

Answer **one** question from this section.

Lithospheric Processes, Hazards and Management

- 5 EITHER**
- (a) Compare the processes and conditions that give rise to the block disintegration and the granular disintegration of rock. [9]
- (b) With reference to examples, discuss the factors that have contributed to the development of granitic landforms. [16]
- OR**
- (a) Using examples, discuss the role of water in influencing the nature of mass movements. [9]
- (b) *'The failure to predict tectonic hazards accurately is the key obstacle to their adequate mitigation.'*
- Discuss the validity of this statement. [16]

Hydrologic Processes, Hazards and Management

- 6 EITHER**
- (a) With the aid of a diagram, explain how critical erosion velocity can help account for the way a river transports its load. [9]
- (b) *'Flood prediction is essential to successful management of flood hazards.'*
- Referring to one or more examples, discuss the validity of this statement. [16]
- OR**
- (a) Compare the hydrological cycle of a forested area and that of an urbanised landscape. [9]
- (b) With reference to examples, discuss possible conflicts of interests that may arise between upstream and downstream states. To what extent can conflicts of interest be resolved? [16]

Section C: Human Geography

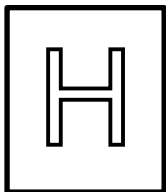
Answer **one** question from this section.

Globalisation of Economic Activity

- 7 EITHER** (a) Explain the term 'small-medium enterprises' and discuss the effects that inward investment can have on them. [9]
- (b) *'Economic and political cooperation with her neighbours is the best way for a nation to remain competitive in the global economy.'*
- Discuss the validity of this statement with reference to located examples. [16]
- OR** (a) Using examples to illustrate your answer, describe and explain what is meant by the term 'newly industrialising economy' (NIE). [9]
- (b) *'The globalisation of economic activity may produce variations in economic wealth.'*
- Discuss this statement with reference to specific examples. [16]

Urban Issues and Challenges

- 8 EITHER** (a) How applicable is the bid rent theory to explain urban land use in Developed Countries (DCs) in the 21st century? [9]
- (b) Assess the costs and benefits of two or more strategies used to manage traffic congestion caused by privately owned cars in urban areas. [16]
- OR** (a) Compare the characteristics of megacities, global cities and primate cities. [9]
- (b) Using located examples analyse the problems of homelessness and substandard housing in large urban areas. [16]



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This insert contains all the Figures and Photographs referred to in the questions.

This document consists of 9 printed pages and 1 blank page.



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Figs. 1A and 1B for Question 1

Geochronology of the Hawaiian Ridge-Emperor Seamount Chain

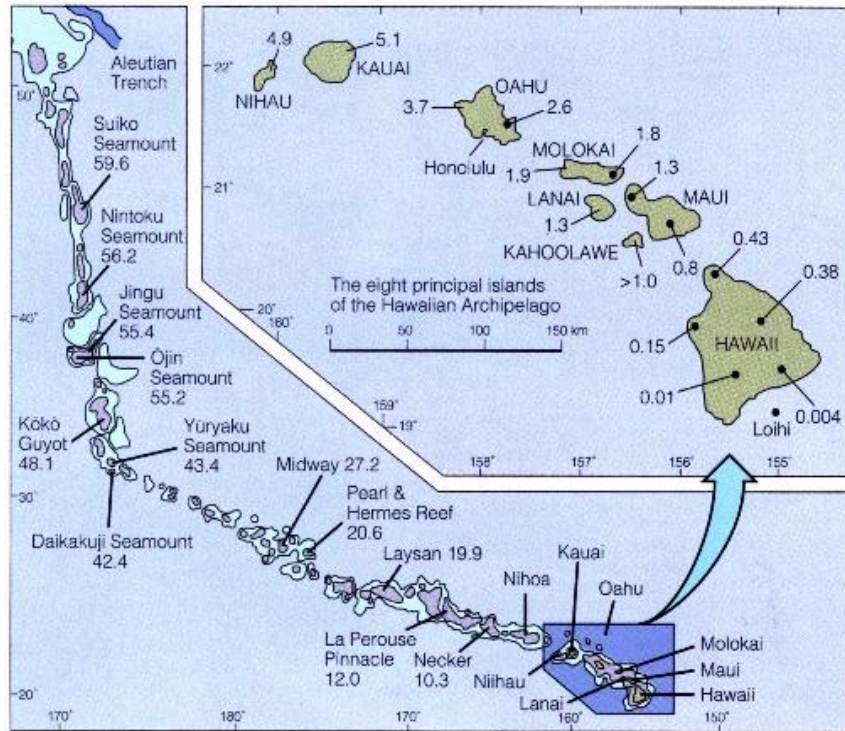


Fig. 1A

(Source: <http://www.uhh.hawaii.edu/~kenhon/geol205/chain/chnmap.jpg>)

Age of the ocean floor of the Pacific, Atlantic and part of the Southern Oceans

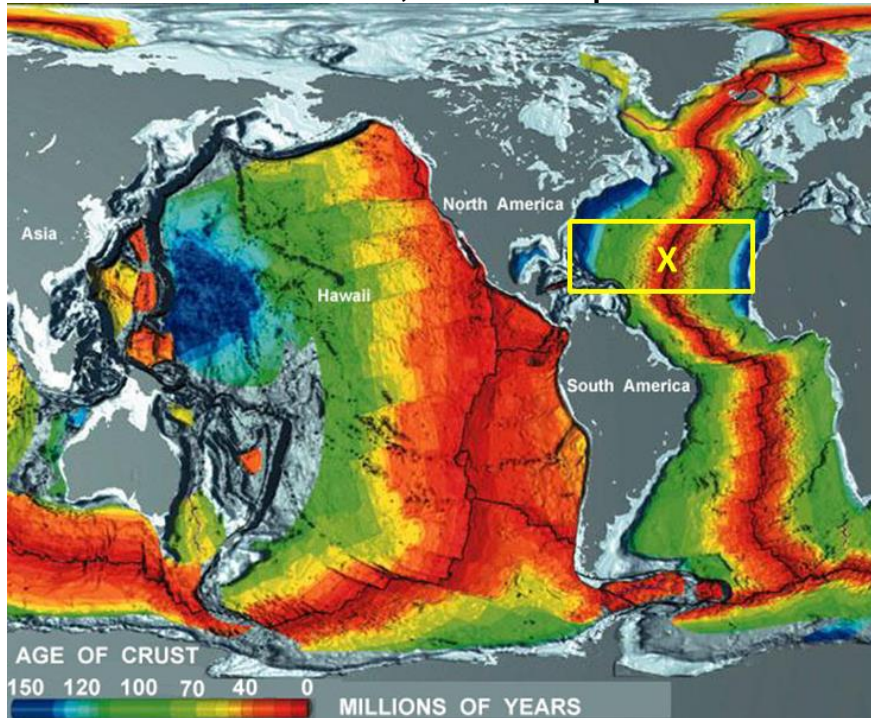


Fig. 1B

(Source: <http://www.uhh.hawaii.edu/~kenhon/geol205/chain/chnmap.jpg>)

Figs. 2A and 2B for Question 2

Cost of one month of broadband subscription in 2011 in USD

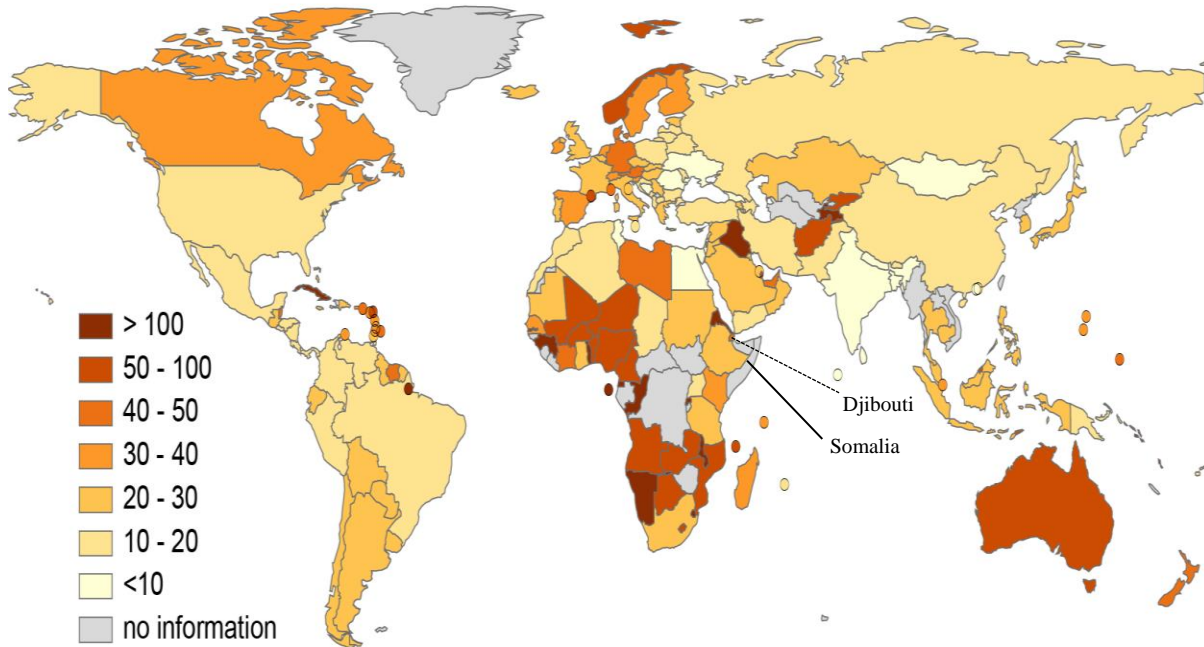


Fig. 2A

Cost of one month of broadband subscription in USD from 2008-2011

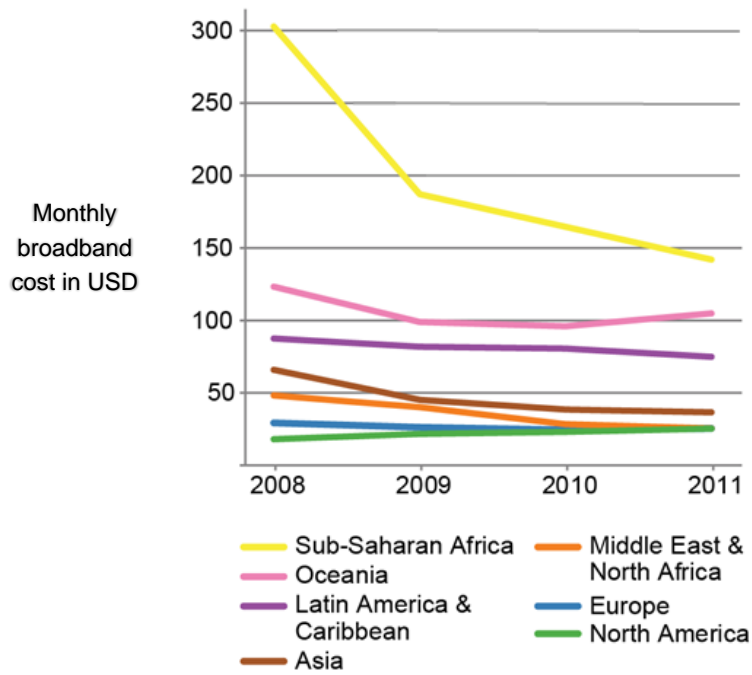


Fig. 2B

Photograph A for Question 2

Somali migrants searching for cell signals at the coast in Djibouti City



(Source: John Stanmeyer (Photographer), National Geographic, Dec 2013)

Photograph B for Question 3 Either
Section of the Taku River in Alaska, USA



(Source: http://riverswithoutborders.org/wp-content/uploads/2014/12/Taku_aerial-best.jpg)

Photographs C and D for Question 3 OR

Photographs C and D show part of the Central Business District (CBD) of a city in a Developed Country (DC) which has recently undergone urban renewal and the re-introduction of railed public transport



Photograph C



Photograph D

Figs. 3A and 3B for Question 4 EITHER

Mean monthly variation in discharge at three gauging stations along River Zambezi

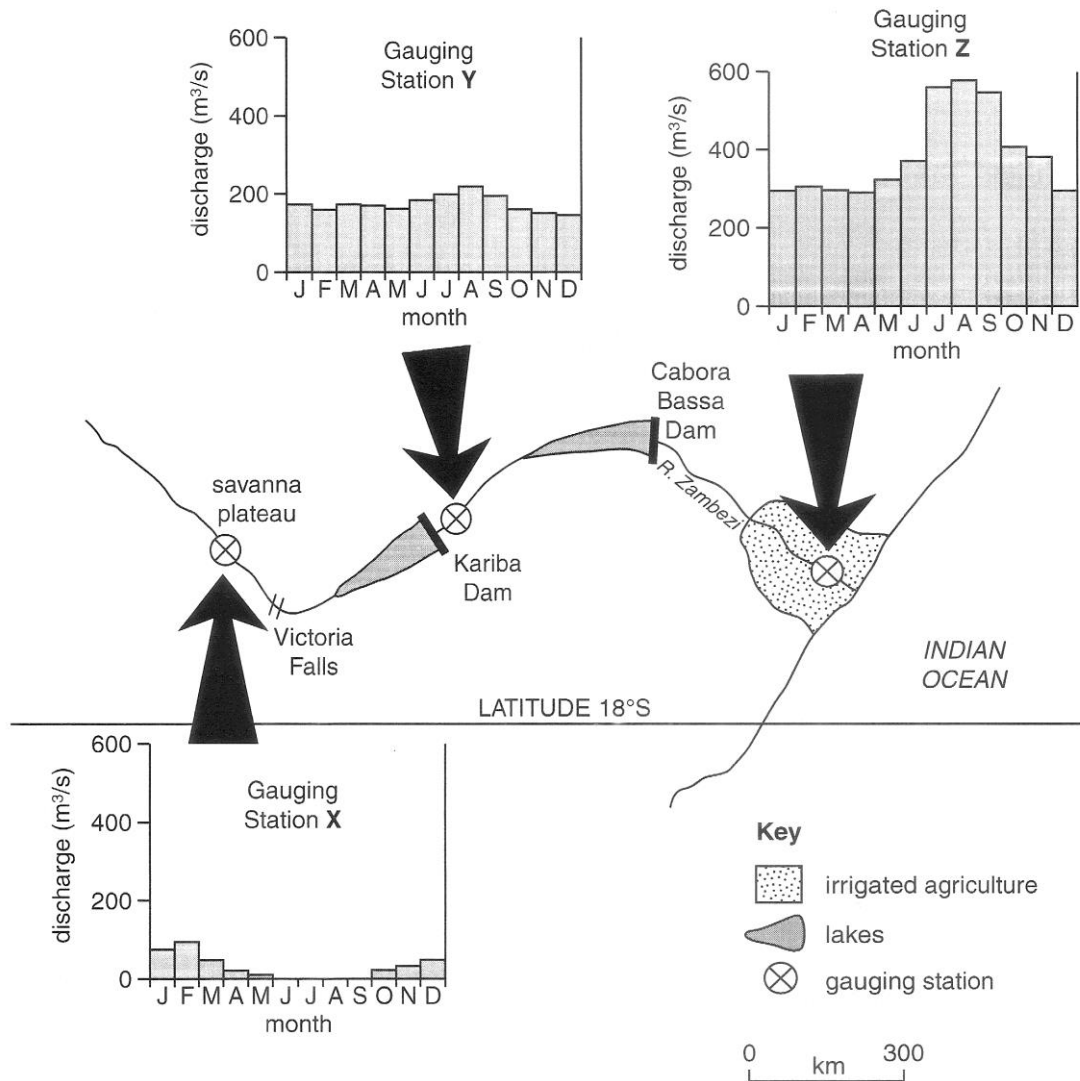


Fig. 3A

Climate graph for the area

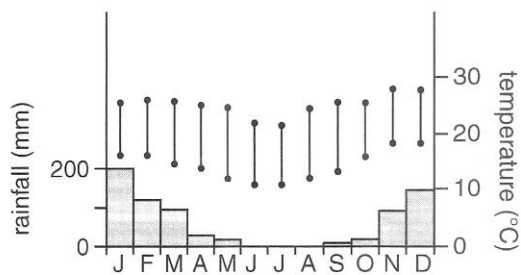


Fig. 3B

Figs. 4A, 4B and 4C for Question 4 OR

Urban Development Plan for the City Of Shanghai for the period between 1999 and 2020



Fig. 4A

Detail Of the Urban Plan For Songjiang New Town for the period between 1999 and 2020

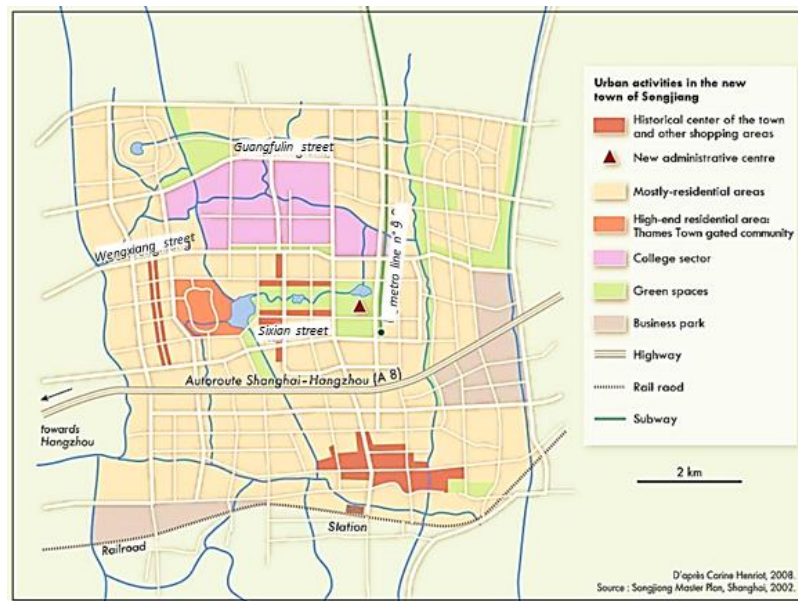


Fig. 4B

Demographic Changes for Shanghai between 2000 and 2010

SHANGHAI'S DEMOGRAPHIC AND EDUCATION BOOM

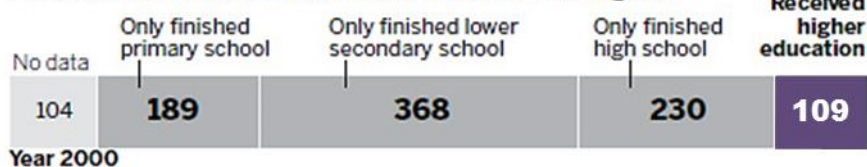
Population

Million people

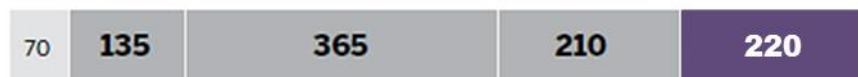
Residents who have *hukou* (permanent residence permits) for places outside of Shanghai



Education, out of 1,000 residents in Shanghai



Year 2000



Year 2010

Source: Shanghai municipal statistics bureau

CHINA DAILY

Fig. 4C