GCE AS/A level

1201/01

GEOGRAPHY G1
CHANGING PHYSICAL ENVIRONMENTS

A.M. WEDNESDAY, 18 January 2012

1 ½ hours

1201
010001

ADDITIONAL MATERIALS

In addition to this examination paper, you will need one 12 page answer book.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

Answer **all** questions.

Write your answers in the separate answer book provided.

Write your name, centre number and candidate number in the spaces at the top of the answer book.

INFORMATION FOR CANDIDATES

Each question carries **25** marks.

The number of marks is given in brackets at the end of each question or part-question.

You are reminded that assessment will take into account the quality of written communication used in your answers.

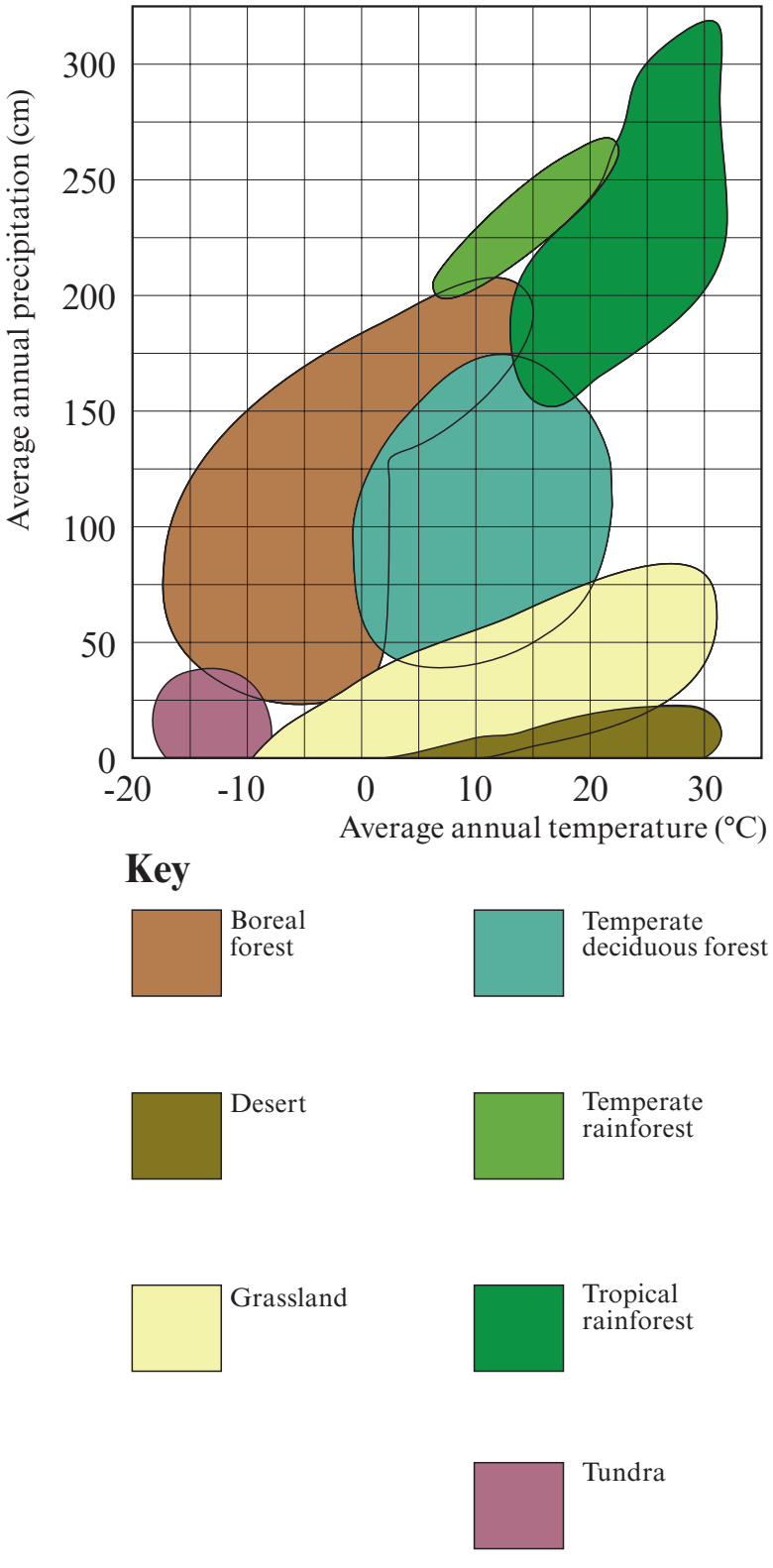
THIS PAPER REQUIRES THAT YOU MAKE THE FULLEST POSSIBLE USE OF APPROPRIATE EXAMPLES IN SUPPORT OF YOUR ANSWERS. SKETCH-MAPS AND DIAGRAMS SHOULD BE INCLUDED WHERE RELEVANT.

G1 - CHANGING PHYSICAL ENVIRONMENTS

Answer **all** *questions.*

Make the fullest possible use of examples in support of your answers.

Figure 1: Precipitation and temperature characteristics of the major biomes



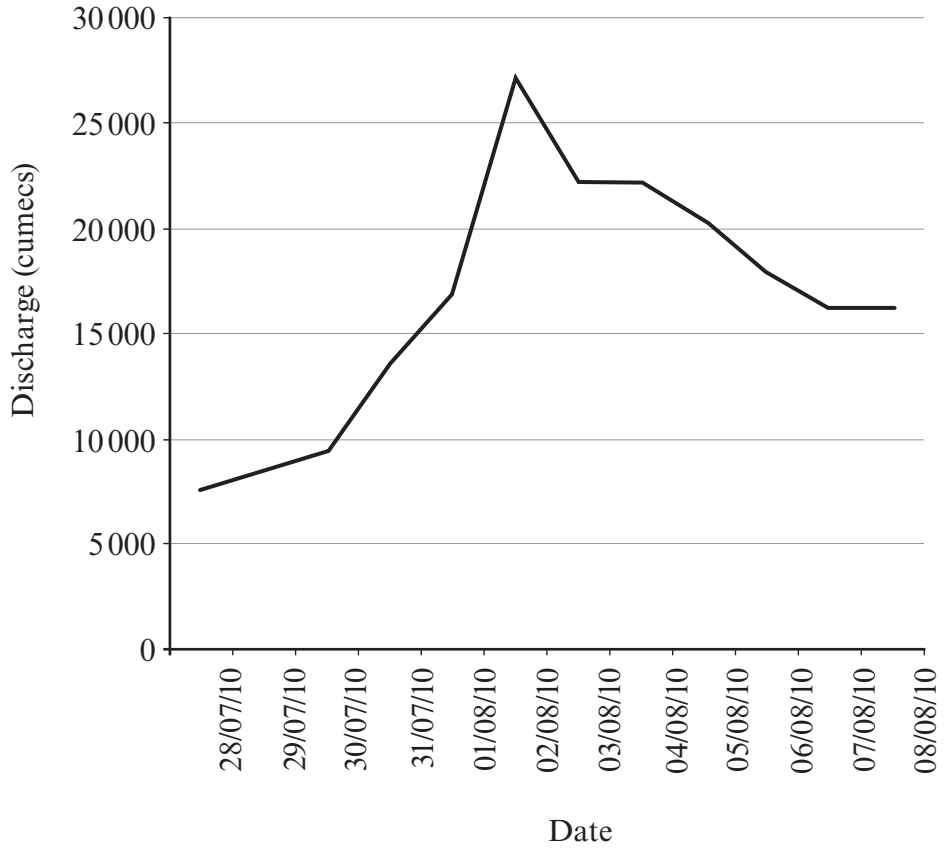
Source: Taken from BC Science 10, Sandner and Lionel. Reproduced by permission of McGraw-Hill Ryerson

1. *(a)* Use **Figure 1** to compare the precipitation and temperature characteristics of the tropical rainforest and grassland biomes. [5]

(b) Explain how human activities have caused recent climate change. [10]

(c) Outline **two** impacts of climate change on society. [10]

Figure 2: Flood Hydrograph of the Indus River at Taunsa, Pakistan



There was intense rainfall on the last three days of July and the first two days of August.

Classification of flow conditions	
Low flow:	7 080 cumecs
Medium flow:	10 600 cumecs
High flow;	14 200 cumecs
Very high flow:	18 400 cumecs
Extremely high flow:	22 700 cumecs

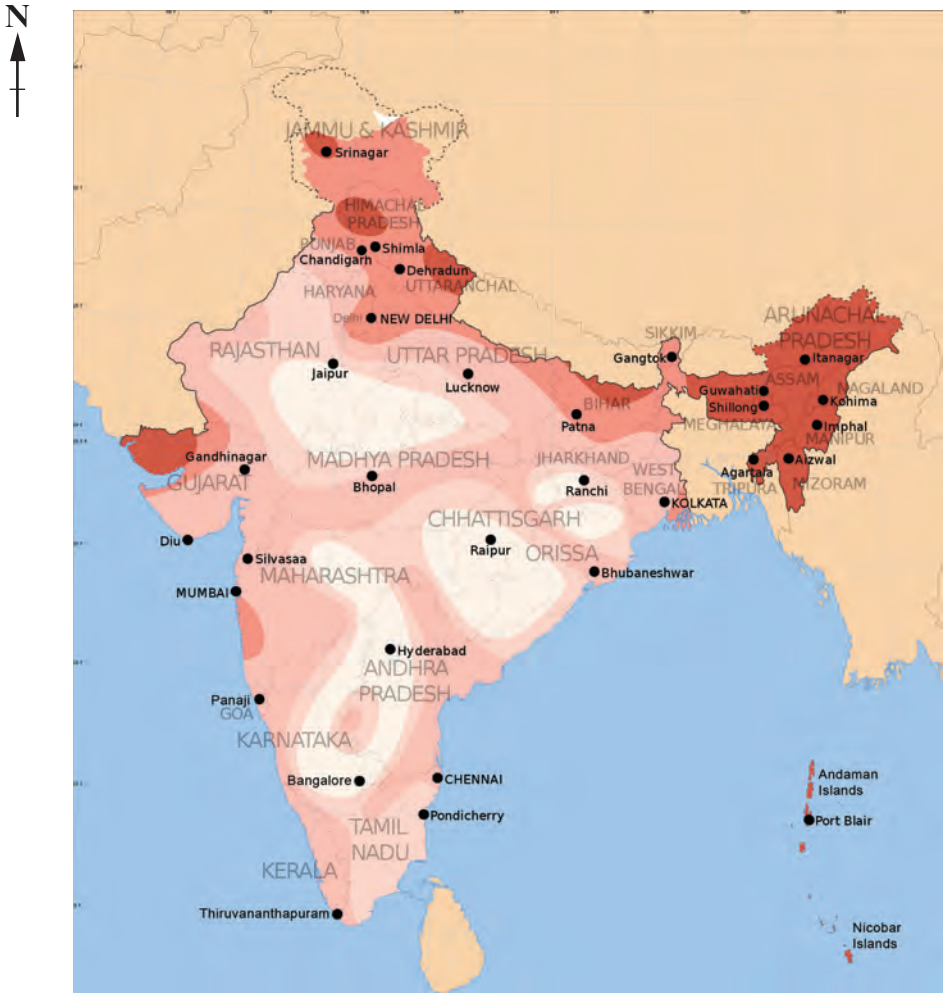
Source: adapted from pakmet.com.pk

2. *(a)* Use **Figure 2** to describe the flood hydrograph at Taunsa. [5]

(b) Explain how **two** human factors affect the shape of flood hydrographs. [10]

(c) Outline the physical impacts of flooding within **one or more** drainage basins. [10]

Figure 3: Earthquake hazard zones, India



Key

Zone 5	Highest damage risk zone. Most powerful earthquakes.
Zone 4	High damage risk zone.
Zone 3	Moderate damage risk zone.
Zone 2	Low damage risk zone.
Zone 1	Least damage risk zone.

• Settlement

Source: http://commons.wikimedia.org

3. *(a)* Use **Figure 3** to describe the distribution of earthquake hazard zones in India. [7]

(b) Describe the strengths and weaknesses of this type of map in the investigation of changing physical environments. [8]

(c) Discuss the main conclusions of an investigation into a changing physical environment that you have completed. [10]

You should state clearly the question you have investigated.

BLANK PAGE