

# **GEOGRAPHY**

## **AIMS**

The aims of this syllabus are to enable candidates

1. to recognize and understand the arrangement of phenomena and features on Earth as well as the inter-relationship and interaction among people, places and environments from spatial and ecological perspectives;
2. to develop geographical skills and basic competencies for further studies and life situations; and
3. to apply geographical knowledge and skills acquired for the betterment of individuals, the society, the nation and the world.

## **OBJECTIVES**

In relation to the above aims, candidates should, after completing this syllabus, be able to

### ***Knowledge and Understanding***

1. know and understand spatial concepts, such as location, distribution, pattern, etc., in order to analyze the spatial organization of natural and human phenomena and features within a geographical framework;
2. identify and explain the characteristics of the major natural systems of the Earth and to analyze the interactions within and between these systems;
3. identify and explain the characteristics of the major human systems of the Earth in order to achieve a sense of place and region;
4. explain how human activities alter natural environments and how natural systems influence human systems;
5. apply geographical knowledge to interpret the past and the present as well as to plan for the future;

### ***Skills***

6. master basic geographical skills, for examples,
  - 6.1 read and interpret a variety of maps at different scales;
  - 6.2 interpret ground and aerial photographs to extract and analyze geographical information from them;
  - 6.3 observe, measure and record data (including interview) systematically and accurately;
  - 6.4 construct and test hypotheses in order to solve geographical problems;
  - 6.5 use appropriate geographical terminology to present materials and arguments;

7. master basic inquiry skills, for examples,
  - 7.1 ask and identify questions from a geographical perspective;
  - 7.2 locate and collect appropriate information and data from a variety of sources;
  - 7.3 select and use appropriate format, such as text (reports, tables, summaries, etc.) and illustrations (diagrams, models, maps, sketches, statistical graphs, etc.) to organize and present information and data;
  - 7.4 use appropriate methods (e.g. analysis, synthesis, comparison, evaluation) to interpret information and data for making inferences and drawing conclusions;
  - 7.5 evaluate the answers, solutions or conclusions drawn from inquiry;
8. master basic competencies, such as communication, thinking, social and numeracy skills for geographical inquiry and life situations;

***Attitudes and Values***

9. show interest in various natural and human characteristics;
10. appreciate the beauty of the Nature and the different living conditions of people;
11. be aware of environmental limitations and problems and take appropriate action to promote sustainable development;
12. cultivate a sense of belonging to their society and nation;
13. show respect for all peoples, their cultures, values and ways of life; and
14. be aware of the increasing global interdependence of peoples and nations, and understand the importance of international solidarity and cooperation.

**THE EXAMINATION**

1. The examination will consist of two papers.
2. Paper 1 will be of 1 hour and 45 minutes' duration and carry 65% of the total subject marks. The paper will consist of Section A (25% of subject marks) and Section B (40% of subject marks).  
Section A will have one compulsory question. The question will be set from one of the six issues and related themes. Various basic skills will be tested. Candidates are advised to spend about 45 minutes on this section.  
Section B will have 5 questions which are set from the whole syllabus. Candidates will answer any two questions and are advised to spend about 30 minutes on each question.
3. Paper 2 will be of 1 hour's duration and carry 35% of the total subject marks. This paper will consist of multiple-choice questions, which may be set on any part of the syllabus.
4. Both Papers 1 and 2 may include the testing of skills, attitudes and values, and mapwork using local topographical maps (1:20 000/1:5 000), and/or simplified map extracts.

## **SYLLABUS CONTENT**

It is proposed that a thematic studies approach is to be adopted as the approach for structuring the syllabus framework. This syllabus is divided into two parts – themes and issues. The ‘themes’ component of the syllabus includes six themes. The main purpose of this part is to help candidates acquire and construct basic geographic knowledge and concepts in a systematic way. In turn this can provide candidates with a solid foundation for further academic study in post-secondary level and equip them with the basic geographic knowledge and skills essential for their daily life situations. The ‘issues’ component, comprising six issues, are related to prevalent matters arising from current events, environmental concerns, news and geographical substances. They aim at helping candidates develop inquiry and thinking skills. It also provides opportunities for candidates to apply what they have acquired to real life situations. Candidates should adopt a combination of themes and issues when studying this syllabus. This should not be restricted to the discussion of one theme and one issue but rather to the combined study on one theme and several issues together or vice versa.

### **Issues**

As issues are related to prevalent matters, with each issue in this syllabus, some guiding questions are provided for reference of teachers and students. Candidates should therefore treat these questions as guidance in their learning process and should not consider them as potential questions in the forthcoming examination.

#### **I. Climatic Anomalies**

Global warming - who should be responsible?

- (a) What is global warming? In what ways are Hong Kong and China affected by global warming?
- (b) What are the causes of global warming? Are industrialized countries the only ones to blame? What is the role of the individual in causing global warming?
- (c) What can be done to alleviate this problem? Why are some countries so reluctant to cooperate in combating the problem? How can we help?

#### **II. Food and Hunger**

Why are there famines and can international aids really help?

- (a) What is famine? Where do most famines occur? What are the similarities found in countries frequently affected by famine?
- (b) Why are there some regions having surplus food production whereas other regions are suffering from famine? Is famine a natural or human-induced disaster?

- (c) Can international aids help those countries affected by food shortage and famine effectively or are they just doing bad job with good motives? Why should we bother about the famines in other countries or regions?

### **III. Natural Hazards**

Is it a rational choice for the people to live in hazard-prone areas?

- (a) Are there any spatial patterns of the occurrence of earthquakes, volcanic eruptions and tsunamis? Why are there such patterns?
- (b) What are the catastrophic effects of the above natural hazards? Why are the less developed areas more vulnerable to natural hazards than the more developed areas?
- (c) Why do people still live in hazard-prone areas? Is their choice rational?

### **IV. Sustainable City**

Can Hong Kong be developed into a sustainable city?

- (a) What is a sustainable city? What are the characteristics of such a city?
- (b) How can we turn Hong Kong into a sustainable city? What are the roles of individual citizens and the Hong Kong SAR Government?
- (c) What are the costs of developing Hong Kong into a sustainable city? Is environmental degradation a necessary evil for economic prosperity? How should we choose?

### **V. The Choice of Power**

How can China maintain a balance between the use of power in industrial development and environmental conservation?

- (a) Where are the major supply regions of fossil fuels in China? Where are the major industrial regions in China? What are the problems caused by such distribution pattern?
- (b) Should China's industry move towards the sources of power supply in the central and western parts of the country or should alternative power supply be developed in the south and the east? What are the pros and cons of each of the measures?
- (c) What is the impact of using coal, nuclear and hydraulic power for the generation of electricity on the environment? What are the advantages and disadvantages of thermal power, nuclear power and hydroelectric power?

## **VI. The Trouble of Water**

How can we solve the problem of water in China?

- (a) Why are there frequent floods in East China? Why does the flow of Huanghe dry up?
- (b) What are the causes of these problems? What consequences do they bring forth?
- (c) How can the problems be solved? What are the pros and cons of different solutions to these problems? Will we create other problems by solving these problems?

### **Themes**

#### **A. Agriculture**

##### *Knowledge and Concepts*

- (a) Agricultural system  
Major inputs, processes and outputs of an agricultural system
- (b) Physical and human factors affecting agriculture
  - (i) Main characteristics of the physical and human inputs of the agricultural systems in Sahel and Southern California
  - (ii) Reasons for the varying agricultural characteristics in Sahel and Southern California even though the natural environment of the two places is very similar
- (c) Use of agricultural technology to overcome agricultural constraints (e.g. lack of water, infertile soils) in Sahel and Southern California
- (d) Negative impact of agricultural technology in Sahel and Southern California
  - (i) Problems of overusing and misuse of agricultural technology
  - (ii) Measures to sustain a balance between the use of technology and the environment

##### *Case Studies*

- Nomadic herding in Sahel
- Irrigation farming in Southern California

**B. City**

*Knowledge and Concepts*

- (a) Urbanization in Hong Kong
  - (i) Reasons for people moving into the city
  - (ii) Impact of such process on land-use pattern
- (b) Changing urban morphology through time
  - Changes in the land use pattern of Hong Kong in the past few decades
- (c) Urban renewal and urban encroachment in Hong Kong
  - (i) Processes and characteristics
  - (ii) Resulting socio-economic and environmental problems
  - (iii) Possible solutions to the above problems
- (d) Conflict between environmental conservation and urban development in Hong Kong
  - (i) Hong Kong's urban planning strategies: some basic principles
  - (ii) Measures taken by the Hong Kong government in recent years

*Case Studies*

- Hong Kong

**C. Climate**

*Knowledge and Concepts*

- (a) Distribution pattern of insolation in the Earth's surface
  - (i) Global distribution pattern of insolation on the Earth's surface
  - (ii) Reasons for the latitudinal differences found in the distribution pattern of insolation
- (b) Relationship between insolation and the global distribution pattern of temperature, precipitation, wind and pressure

- (i) Global distribution pattern of temperature, precipitation, pressure and wind
- (ii) Relationship between insolation and global temperature distribution pattern
- (iii) Interrelationship among the global distribution pattern of temperature precipitation, pressure and wind
- (c) Climate of the low-latitude region as well as the middle and high-latitude region (with reference to the four case studies)
  - (i) Major factors affecting the climates of the low-latitude region as well as the middle and high-latitude region
  - (ii) Reasons for climatic variations in areas of similar latitudes
- (d) Impact of climate on human beings (on their livelihood and production)

Examples: daily life, population distribution, agriculture

*Case Studies*

- Low-latitude region:  
tropical humid climate and tropical arid climate (Malaysia; Somalia)
- Middle and high-latitude region:  
temperate maritime climate and temperate continental climate (Shandong; Xinjiang)

**D. Industry**

*Knowledge and Concept*

- (a) Major factors affecting the location of industry
  - (i) Traditional dominant factors, such as power, raw materials
  - (ii) The role of technology
  - (iii) Other locational factors with increasing significance in recent years (e.g. human resources, research and development)
- (b) Location of iron and steel industry
  - (i) Factors affecting the location of iron and steel industry
  - (ii) Changing location of iron and steel industry and role of technology
  - (iii) Industrial inertia in iron and steel industry

- (c) Location of information technology industry
  - (i) Factors affecting the location of information technology industry
  - (ii) Multi-point and transnational production: characteristics and reasons for its appearance
- (d) Impact of industrial relocation and appearance of new production mode  
Examples: urban decay, unemployment, flow of labour

*Case Studies*

- Iron and steel industry in China
- Information technology industry in U.S.A.

**E. Landforms and Endogenetic Processes**

*Knowledge and Concepts*

- (a) Major endogenetic processes  
Folding, faulting, intrusive and extrusive vulcanicity
- (b) Plate tectonics in Asia-Pacific Region
  - (i) Distribution of continental and oceanic plates
  - (ii) Type of plate boundaries: constructive, destructive and conservative
- (c) Resultant landform features of plate convergence and divergence in Asia-Pacific Region
  - (i) Formation and characteristics of major landform features found at constructive and destructive plate boundaries (e.g. fold mountain, volcano, mid-oceanic ridge)
  - (ii) Relationship among plate movement, endogenetic processes and resultant landform features
- (d) Impact of endogenetic processes on human beings  
Examples: impact of the distribution of mineral and power resources, natural hazards such as volcanic eruptions, earthquakes and tsunamis

*Case Studies*

- Asia-Pacific Region (from Himalayas to Easter Island)



## **F. Landforms and Exogenetic Processes**

### *Knowledge and Concepts*

- (a) Basic operation of water cycle
  - (i) Major processes of water cycle (e.g. evaporation and evapotranspiration, condensation, precipitation, surface runoff, infiltration, throughflow)
  - (ii) Brief description of the operation of water cycle
- (b) River basin as a system
  - Major inputs, processes and outputs of a river basin
- (c) Fluvial erosion, transportation and deposition - types, characteristics and resultant landform features
  - (i) Major erosional, transportation and depositional processes of a river
  - (ii) Major landform features at the upper, middle and lower courses of Changjiang (e.g. river valley, waterfall, flood plain, delta)
- (d) Fluvial erosion and deposition at different courses of the river
  - (i) Different characteristics of the erosional and depositional processes at different courses of the river
  - (ii) Reasons for such differences
- (e) Impact of river on human activities
  - Examples: the importance of Changjiang in irrigation and transportation and the impact of flooding

### *Case Studies*

- Changjiang