



آغا خان یونیورسٹی ایگزامینیشن بورڈ
AGA KHAN UNIVERSITY EXAMINATION BOARD

Secondary School Certificate Examination Syllabus

GEOGRAPHY

CLASSES IX-X

(based on National Curriculum 2002)

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**Secondary School Certificate
Examination Syllabus**

GEOGRAPHY
CLASSES IX-X

**This subject is examined in the
May Examination session only**

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PREFACE

In pursuance of National Education Policy (1998-2010), the Curriculum Wing of the Federal Ministry of Education has begun a process of curriculum reform to improve the quality of education through curriculum revision and textbook development (Preface, National Curriculum documents 2000 and 2002).

AKU-EB was founded in August 2003 with the same aim of improving the quality of education nationwide. As befits an examination board it seeks to reinforce the National Curriculum revision through the development of appropriate examinations for the Secondary School Certificate (SSC) and Higher Secondary School Certificate (HSSC) based on the latest National Curriculum and subject syllabus guidance.

AKU-EB has a mandate by Ordinance CXIV of 2002 to offer such examination services to English and Urdu medium candidates for SSC and HSSC from private schools anywhere in Pakistan or abroad, and from government schools with the relevant permissions. It has been accorded this mandate to introduce a choice of examination and associated educational approach for schools, thus fulfilling a key objective of the National Curriculum of Pakistan: “Autonomy will be given to the Examination Boards and Research and Development cells will be established in each Board to improve the system” (ibid. para. 6.5.3 (ii)).

AKU-EB is committed to creating continuity of educational experience and the best possible opportunities for its students. In consequence it offered HSSC for the first time in September, 2007 to coincide with the arrival of its first SSC students in college or higher secondary school. Needless to say this is not an exclusive offer. Private candidates and students joining AKU-EB affiliated schools and colleges for HSSC Part 1 are eligible to register as AKU-EB candidates even though they have not hitherto been associated with AKU-EB.

This examination syllabus exemplifies AKU-EB’s commitment to national educational goals.

- It is in large part a reproduction, with some elaboration, of the Class IX and X National Curriculum of the subject.
- It makes the National Curriculum freely available to the general public.
- The syllabus recommends a range of suitable textbooks already in print for student purchase and additional texts for the school library.
- It identifies areas where teachers should work together to generate classroom activities and materials for their students as a step towards the introduction of multiple textbooks, another of the Ministry of Education’s policy provisions for the improvement of secondary education (ibid. para. 6.3.4).

This examination syllabus brings together all those cognitive outcomes of the National Curriculum statement which can be reliably and validly assessed. While the focus is on the cognitive domain, particular emphasis is given to the application of knowledge and understanding, a fundamental activity in fostering “attitudes befitting useful and peaceful citizens and the skills for and commitment to lifelong learning which is the cornerstone of national economic development” (Preface to National Curriculum documents 2000 and 2002).

To achieve this end AKU-EB has brought together university academics, teacher trainers, writers of learning materials and above all, experienced teachers, in regular workshops and subject panel meetings.

AKU-EB provides copies of the examination syllabus to subject teachers in affiliated schools to help them in planning their teaching. It is the syllabus, not the prescribed text book which is the basis of AKU-EB examinations. In addition, the AKU-EB examination syllabus can be used to identify the training needs of subject teachers and to develop learning support materials for students. Involving classroom teachers in these activities is an important part of the AKU-EB strategy for improving the quality of learning in schools.

The Curriculum Wing of the Federal Ministry of Education has recently released new subject specifications and schemes of study to take effect in September, 2008. These documents are a major step forward towards a standards-related curriculum and have been welcomed by AKU-EB. Our current SSC syllabuses have been revised to ensure conformity with the new National Curriculum 2006.

We stand committed to all students entering the SSC course as well as those who have recently embarked upon the HSSC course in facilitating their learning outcome. Our examination syllabus document ensures all possible support.



Dr. Thomas Christie
Director,
Aga Khan University Examination Board
July 2009

1. Aims/Objectives of the National Curriculum (2002)¹

The National Curriculum for Geography states the following objectives:

Objectives:

- 1.1 “to emphasize learning in a way that encourages comprehension, observation, creativity, questioning, application and evaluation skills;
- 1.2 to create an understanding of the key concepts, ideas, principles, nature and spirit in relation to physical and human Geography through systematic study of various content matter;
- 1.3 to provide an understanding and appreciation of the interrelationships between physical environment and human activities and conceptual clarification of man environment system;
- 1.4 to inculcate in students the qualities of national character, love for country, and sense of national unity, integrity and gratitude to Almighty Allah for having exemplary physical and human resources;
- 1.5 to provide understanding of the basic geographical character of locality/ society and day to day problems faced by human beings in which they live;
- 1.6 to develop comprehension of interpreting data presented in various forms i.e. models, charts, illustrations, statistics, maps, diagrams, atlas, extracts and written materials;
- 1.7 to develop a positive attitude towards geography discipline as an intellectually satisfying subject relevant to everyday life.”

2. Rationale of the AKU-EB Examination Syllabus

2.1 General Rationale

2.1.1 In 2007, the Curriculum Wing of the Federal Ministry of Education (MoE) issued a revised part-wise Scheme of Studies. All subjects are to be taught and examined in both classes IX and X. It is therefore important for teachers, students, parents and other stakeholders to know:

- (a) that the AKU-EB Scheme of Studies for its SSC examination (Annex) derives directly from the 2007 Ministry of Education Scheme of Studies;
- (b) which topics will be examined in Class IX and in Class X;
- (c) at which cognitive level or levels (Knowledge, Understanding, Application and other higher order skills) the topics and sub-topics will be taught and examined;

¹ Government of Pakistan (2002), *National Curriculum; Geography Classes IX-X*, Islamabad, Ministry of Education (Curriculum Wing)

- 2.1.2 This AKU-EB examination syllabus addresses these concerns. Without such guidance teachers and students have little option other than following a single textbook to prepare for an external examination. The result is a culture of rote memorization as the preferred method of examination preparation. The pedagogically desirable objectives of the National Curriculum which encourage “observation, creativity and other higher order thinking skills” are generally ignored. AKU-EB recommends that teachers and students use multiple teaching-learning resources for achieving the specific objectives of the National Curriculum reproduced in the AKU-EB examination syllabuses.
- 2.1.3 The AKU-EB examination syllabuses use a uniform layout for all subjects to make them easier for teachers to follow. Blank sheets are provided in each syllabus for writing notes on potential lesson plans. It is expected that this arrangement will also be found helpful by teachers in developing classroom assessments as well as by question setters preparing material for the AKU-EB external examinations. The AKU-EB aims to enhance the quality of education through improved classroom practices and improved examinations.
- 2.1.4 The Student Learning Outcomes (SLOs) in Section 3 start with command words such as list, describe, relate, explain, etc. The purpose of the command words is to direct the attention of teachers and students to specific tasks that candidates following the AKU-EB examination syllabuses are expected to undertake in the course of their subject studies. The examination questions will be framed using the same command words or the connotation of the command words to elicit evidence of these competencies in candidates’ responses. The definitions of command words used in this syllabus are given in Section 7. It is hoped that teachers will find these definitions useful in planning their lessons and classroom assessments.
- 2.1.5 The AKU-EB has classified SLOs under the three cognitive levels Knowledge (K), Understanding (U) and Application of knowledge and skills (A) in order to derive multiple choice questions and constructed response questions on a rational basis from the subject syllabuses ensuring that the intentions of the National Curriculum should be met in full. The weighting of marks to the Multiple Choice and Constructed Response Papers is also derived from the SLOs, command words and cognitive levels. In effect the SLOs derived from the National Curriculum determine the structure of the AKU-EB subject examination set out in Section 4 and 5.
- 2.1.6 Some topics from the National Curriculum have been elaborated and enriched for better understanding of the subject and/or to better meet the needs of students in the twenty-first century. These additional topics have been italicized in Section 3 of this syllabus.

2.2 Specific Rationale of the AKU-EB Geography Examination Syllabus

- 2.2.1 The study of Geography has its major thrust on the improvement of the quality of life and welfare of human beings. This discipline enhances the approach towards rational behaviour in daily life.
- 2.2.2 In response to shifting global trends and priorities in an era of scientific and technological advancements there is a continuous need to update the syllabus for teaching Geography at the secondary level. With the need to remain abreast of current developments in mind, AKU-EB, within the ambit of the National Curriculum, has further augmented in the Geography syllabus. The additional topics include rocks, water cycle, migration, economic activities and development.
- 2.2.3 There has also been some reordering of material to facilitate teaching. Location and thus work with maps is fundamental to the study of Geography. The study of maps has been brought forward from the end of the National Syllabus to the beginning of this syllabus so that all subsequent sections can benefit from map work. In the same spirit of encouraging more active approaches to classroom learning two SLOs are designed to encourage field work, no matter how informal. It is hoped to develop from these small beginnings in future versions of the AKU-EB Geography syllabus.
- 2.2.4 The nature and scope under chapter 'Introduction to Human Geography' has been brought forward under the first chapter 'Understanding Geography'. Hence, the number of chapters reduced to 9 against the 10 in the National Curriculum.

3. Topics and Student Learning Outcomes of the Examination Syllabus

Part I (Class IX)

Topic	Student Learning Outcomes		Cognitive Level ²		
			K	U	A
1. Understanding Geography	Candidates should be able to:				
1.1 Geography nature and scope	1.1.1 1.1.2 1.1.3	define Geography and describe its main branches-physical and human; explain the relationship between physical and human worlds; discuss the functions and uses of the study of Geography in modern life;	*	*	
1.2 Relation with other subjects	1.2.1	explain the relationship of Geography to Geology, Physics, Biology, Economics, History and Anthropology;		*	
1.3 Muslim contribution	1.3.1 1.3.2	explain the branches of Geography most developed by Muslim geographers; explain some famous Muslim geographers and write their main contribution;		*	
1.4 The place of Earth in the universe	1.4.1 1.4.2 1.4.3	define that the sun is one of myriad stars in the universe; draw the position of the Earth in the solar system; write the approximate circumference of the earth in kms and the approximate distance in kms from the earth to the sun;	*		*
1.5 The movement of the Earth	1.5.1 1.5.2 1.5.3 1.5.4	describe the shape of the Earth; differentiate between rotation and revolution of the Earth; explain the effects of rotation-day and night; explain the effects of revolution:- eclipses of the sun and the phases of the moon.		*	

² K = Knowledge, U = Understanding, A= Application (for explanation see Section 8: Definition of command words used in Student Learning Outcomes and in Examination Questions).

NOTES

			K	U	A
2. Map Reading		Candidates should be able to:			
2.1 The importance of maps	2.1.1	define what is a map: heading, scale, key and direction;	*		
	2.1.2	explain the uses and the importance of maps;		*	
	2.1.3	read a map making appropriate use of heading, scale, key, direction;			*
	2.1.4	recognize how different man-made features are represented in conventional symbols;	*		
	2.1.5	illustrate how contours indicate slopes;			*
	2.1.6	draw a sketch map of the school in its immediate surroundings with appropriate scale, heading and key;			*
2.2 Types of maps	2.2.1	explain some types of maps: physical, temperature, rainfall, vegetation, political, population;		*	
	2.2.2	distinguish a physical map from population map;		*	
	2.2.3	compare different types of maps according to scale and purpose;		*	
	2.2.4	differentiate between physical and political maps according to their appearance;		*	
2.3 Longitude and latitude	2.3.1	define longitude and latitude;	*		
	2.3.2	explain how important lines of latitude (the Arctic Circle, the Tropics of Capricorn and Cancer, the Equator) are located;		*	
	2.3.3	describe the relationship of local time to longitude;		*	
	2.3.4	explain how standard time relates to local time and why the International Date Line is necessary;		*	
	2.3.5	apply latitude and longitude to locate Pakistan, the countries of South East Asia and the continents on the map of the world.			*

NOTES

				K	U	A
3. The Land		Candidates should be able to:				
3.1	The structure of the Earth	3.1.1	explain the meaning of Earth’s structure;		*	
		3.1.2	<i>explain the crust of the Earth;</i>		*	
		3.1.3	<i>describe the main character of the core of the Earth and their importance;</i>		*	
3.2	Rocks	3.2.1	<i>describe the major types of rocks;</i>		*	
		3.2.2	<i>describe the formation of rocks: granite metamorphic sedimentary</i>		*	
3.3	Landforms resulting from tectonic processes	3.3.1	<i>explain processes of earth movement;</i>	*	*	
		3.3.2	<i>describe tectonic processes and landforms resulting from them (fold mountains, volcanoes, ridges, sea floor spreading);</i>			
		3.3.3	<i>explain main landforms developed through earth movements and related processes, fold mountains, faults and volcanoes;</i>		*	
		3.3.4	<i>identify the main fold mountains on a map of the world;</i>			*
		3.3.5	<i>locate and name the main ranges of fold mountains on a world map;</i>			*
		3.3.6	<i>describe the effects of volcanic eruptions on human life;</i>		*	
3.4	Agents which change the earth surface	3.4.1	define the agents of change river, glaciers, winds and their work erosion, transportation and deposition;	*		
		3.4.2	explain landforms produced by erosion and deposition; (Headlands and bays; cliffs; wave-cut platforms; caves; arches and stacks; beaches spits; bars)		*	
		3.4.3	describe the actions of rivers erosion, transportation, deposition;		*	
		3.4.4	account for the landforms resulting from the action of rivers, valleys, flood plains, deltas, seas and oceans; (Wave characteristics and erosion; longshore drift; wave deposition)		*	
		3.4.5	locate landforms resulting from the action of rivers in the Indus River System;			*

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			K	U	A
	3.4.6	explain the importance of rivers in Pakistan (i) valleys-communications (ii) flood plains-alluvium (iii) flooding-advantages and disadvantages.		*	
4. Oceans, Seas and Coasts	Candidates should be able to:				
4.1 The oceans and seas	4.1.1	distinguish oceans, seas, gulf and isthmus;		*	
	4.1.2	locate the five oceans (Southern, Pacific, Atlantic, Indian, Arctic) and the main seas on a world map;			*
	4.1.3	describe the effects of oceans on human life;		*	
	4.1.4	explain the reasons for ocean currents being warm and cold;		*	
4.2 The influences of ocean currents on adjoining coasts	4.2.1	define the ocean current;	*		
	4.2.2	describe the type of ocean currents and their distribution;		*	
	4.2.3	describe and explain the influences of warm and cold ocean currents on adjoining coasts;		*	
	4.2.4	define the effects of ocean currents on human life;	*		
	4.2.5	highlight the importance of coastal ecosystems and biodiversity; (coral reefs and mangroves)		*	
4.3 The influence of tides on coastlines	4.3.1	how tides are caused;		*	
	4.3.2	elaborate the existence of tides;		*	
	4.3.3	describe the effect of tides on coastlines;		*	
	4.3.4	describe the effects of tides on human life;		*	
	4.3.5	analyze the affects of tourism and other development on the coastline.			*
	4.3.6	elaborate the different types of methods used for coastal protection: soft and hard defenses.		*	

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			K	U	A
5. The Atmosphere	Candidates should be able to:				
5.1 Composition and extent	5.1.1	describe the composition of the atmosphere, i.e. various gases, dust, water vapours;		*	
	5.1.2	state the height of the atmosphere and the protection it provides against radiation;	*		
	5.1.3	explain the effects of pollution on the atmosphere;		*	
5.2. Elements of weather	5.2.1	state the elements of weather: temperature, atmospheric pressure, winds, clouds and rainfall;	*		
	5.2.2	distinguish between weather and climate;		*	
5.3 <i>The water cycle</i>	5.3.1	<i>describe and explain the water cycle;</i>		*	
	5.3.2	explain how clouds are formed;		*	
	5.3.3	describe different types of clouds;		*	
	5.3.4	explain the different types of rainfall-relief, convectional, frontal;		*	
5.4 Climatic influence	5.4.1	explain how atmospheric temperature changes with height and in horizontal temperature zones;		*	
	5.4.2	describe atmospheric pressure and pressure belts;		*	
	5.4.3	describe the major types of wind-planetary (westerly and polar), trade, monsoon, local, seasonal;		*	
5.5 Types of climate	5.5.1	discuss the monsoon, Mediterranean and equatorial types of climate and their world distributions;		*	
	5.5.2	explain the influences of climate on human activities especially on agriculture;		*	
	5.5.3	discuss the environmental problems associated with different types of climate- floods, droughts, landslides;		*	

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			K	U	A
5.6	Hazardous Environment	5.6.1		*	
		5.6.2		*	
		5.6.3			*

NOTES

Part II (Class X)

Topic	Student Learning Outcomes		Cognitive Level		
			K	U	A
6. Population	Candidates should be able to:				
6.1 Structure	6.1.1	define population structure-age, sex;	*		
	6.1.2	interpret population pyramids;			*
6.2 Distribution and density	6.2.1	distinguish between distribution and density;		*	
	6.2.2	identify the broad pattern of high, medium and low densities of population on a map of the world;		*	
	6.2.3	account for these major differences in population density;			*
6.3 Migration	6.3.1	<i>define migration;</i>	*		
	6.3.2	<i>define types of migration—rural to urban, rural to rural, urban to rural, urban to urban, international;</i>	*		
6.4 Growth	6.4.1	define population growth;	*		
	6.4.2	discuss causes of growth: natural increase;		*	
6.5 Control and welfare of population	6.5.1	define what is meant by population welfare;	*		
	6.5.2	analyse the need for population welfare in Pakistan;			*
	6.5.3	compare and contrast the effects of population welfare policies in China, India, Pakistan;		*	
	6.5.4	collect and analyse data for a small sample in your area;			*
	6.5.5	explain the importance of population planning.		*	

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			K	U	A
7. Human Settlement		Candidates should be able to:			
7.1 Types of settlement	7.1.1	describe types of settlement-rural, urban;		*	
	7.1.2	describe the key features of a specific rural settlement in Pakistan and its physical, social and economic problems;		*	
	7.1.3	describe the key features of a specific 'Kachi Abadi' and its physical, social and economic problems;		*	
7.2 Functions of settlements	7.2.1	describe functions of settlements-industrial, commercial, residential, administrative;		*	
	7.2.2	explain the relationship between function and size of settlement;		*	
	7.2.3	describe and explain the influence of location on the main functions in: (i) Singapore (ii) Karachi (iii) Peshawar;		*	
7.3 The growth of settlements	7.3.1	explain the reasons for the growth of Faisalabad and Quetta;		*	
	7.3.2	discuss the problems in Peshawar and Hyderabad which have resulted from their growth;		*	
	7.3.3	discuss the main factors that should be considered in planning the development of a settlement;		*	
7.4 Urban Environments	7.4.1	define urbanization including suburbanization and counter-urbanization;	*		
	7.4.2	identify some of the factors affecting the rate of urbanization and the emergence of mega cities.		*	
	7.4.3	analyse the problems associated with rapid urbanization including congestion, transport, employment, crime and environmental quality.			*

NOTES

			K	U	A
8. <i>Economic Activities and Development</i>	Candidates should be able to:				
8.1 <i>Resources</i>	8.1.1	<i>define ‘renewable’ and ‘non-renewable’ resources and give examples;</i>		*	
8.2 <i>Classification of economic activities</i>	8.2.1	<i>classify economic activities as: (i) primary-agriculture, mining, forestry, fishing (ii) secondary-manufacturing and processing industries (iii) tertiary services including telecommunications, banking, retail;</i>		*	
8.3 <i>Production systems</i>	8.3.1	<i>describe the system of production as inputs, processes, outputs;</i>		*	
	8.3.2	<i>describe agricultural systems in Pakistan as e.g. subsistence and cash crop farming;</i>		*	
	8.3.3	<i>compare and contrast industrial systems e.g. large-scale cotton textiles in Pakistan, small-scale sports goods and surgical instruments in Sialkot;</i>		*	
8.4 <i>Trade</i>	8.4.1	<i>draw a graph to depict the pattern of trade in Pakistan over the years; GDP</i>			*
	8.4.2	<i>describe the world trade in crude oil (petroleum);</i>		*	
8.5 <i>Transport and communications</i>	8.5.1	<i>explain the importance of road and rail communication for the development of trade in Pakistan;</i>		*	
	8.5.2	<i>state the factors which encourage or hinder the development of road and rail communications in Pakistan;</i>	*		
	8.5.3	<i>name the main seaports and airports and draw the main sea and air routes from Pakistan on a world map;</i>	*		
8.6 <i>Development</i>	8.6.1	<i>recognize and describe the features which indicate different levels of development of countries;</i>		*	
	8.6.2	<i>compare the levels of development of Japan and Afghanistan;</i>		*	

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			K	U	A
	8.6.3	<i>discuss the factors which affect the levels of development of Japan and Afghanistan.</i>		*	
9. Environmental issues	Candidates should be able to:				
9.1 Problems in the environment	9.1.1	explain the causes in Pakistan of: i) air and water pollution ii) water logging and salinity iii) desertification;		*	
9.2 Management and conservation of the environment	9.1.2	discuss the likely causes and consequences of global warming and deforestation; (use of fossil fuels, air pollution, agricultural change and CFC)		*	
	9.2.1	describe methods of waste management in urban and rural locations in Pakistan; (anti-pollution legislation)		*	
	9.2.2	describe a specific example of the management and conservation of the environment in Pakistan e.g. a dam or irrigation system;		*	
9.3 Sustainable development	9.3.1	explain the meaning of ‘sustainable development’;		*	
	9.3.2	describe renewable sources of power-water, wind, solar heating;		*	
	9.3.3	describe electricity generation at Ghazi–Barotha as an example of hydroelectric power.		*	

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4. Scheme of Assessment

Class IX

Table 1: Number of Student Learning Outcomes by Cognitive Level

Topic No.	Topics	No. of Sub-topics	SLOs			Total
			K	U	A	
1.	Understanding Geography	5	3	8	2	13
2.	Map Reading	3	4	5	7	16
3.	The Land	4	6	10	3	19
4.	Oceans, Seas and Coasts	3	6	7	6	19
5.	The Atmosphere	6	7	7	6	19
	Total	21	26	37	24	86
	Percentage		30	41	29	100

Table 2: Allocation of Marks for Multiple Choice Questions (MCQs), Constructed Response Questions (CRQs) and Extended Response Questions (ERQs)

Topic No.	Topics	No. of Sub-topics	Marks			Total
			Multiple Choice Questions	Constructed Response Questions	Extended Response Questions	
1.	Understanding Geography	5	5	5	7	35
2.	Map Reading	3	5	5 8		
3.	The Land	4	5	7	8	40
4.	Oceans, Seas and Coasts	3	5	5		
5.	The Atmosphere	6	5	5		
	Total	21	25	35	15	75

Table 3: Paper Specifications

Topic No.	Topics	Marks Distribution			Total Marks
1.	Understanding Geography	MCQs 10 @ 1 Mark CRQs 3 @ 5, 5, 8 Marks *ERQ 1 @ 7 Marks Choose any ONE from TWO			35
2.	Map Reading				
3.	The Land	MCQs 15 @ 1 Mark CRQs 3 @ 7, 5, 5 Marks *ERQ 1 @ 8 Marks Choose any ONE from TWO			40
4.	Oceans, Seas and Coasts				
5.	The Atmosphere				
	Total Marks	MCQs 25	CRQs 35	ERQs 15	75

* Extended response questions (ERQs) will require answers in more descriptive form. The answers will be in a paragraph rather than a word or a single sentence.

* There will be TWO questions and the candidates will be required to attempt any ONE by making a choice out of the TWO.

Class X

Table 4: Number of Student Learning Outcomes by Cognitive Level

Topic No.	Topics	No. of Sub-topics	SLOs			Total
			K	U	A	
6.	Population	5	4	4	7	14
7.	Human Settlement	4	3	3	6	12
8.	Economic Activities and Development	6	2	7	4	13
9.	Environmental Issues	3	3	5	1	9
	Total	18	12	19	18	48
	Percentage		25	38	37	100

**Table 5: Allocation of Marks for the Objective Test,
Constructed Response Paper and Extended Response Paper**

Topic No.	Topics	No. of Sub-topics	Marks			Total
			Multiple Choice Questions	Constructed Response Questions	Extended Response Questions	
6	Population	5	5	5	7	35
				6		
7	Human Settlement	4	5	7		
8	Economic Activities and Development	6	8	4	8	40
				5		
9	Environmental Issues	3	7	8		
	Total	18	25	35	15	75

Table 6: Paper Specifications

Topic No.	Topics	Marks Distribution			Total Marks
6	Population	MCQs 10 @ 1 Mark CRQs 3 @ 5, 6, 7 Marks *ERQ 1 @ 7 Marks Choose any ONE from TWO			35
7	Human Settlement				
8	Economic Activities and Development	MCQs 15 @ 1 Mark CRQs 3 @ 4, 5, 8 Marks *ERQ 1 @ 8 Marks Choose any ONE from TWO			40
9	Environmental Issues				
	Total Marks	MCQs 25	CRQs 35	ERQs 15	75

* Extended response questions (ERQs) will require answers in more descriptive form. The answers will be in a paragraph rather than a word or a single sentence.

* There will be TWO questions and the candidates will be required to attempt any ONE by making a choice out of the TWO.

- 4.1 Tables 1 and 4 summarize the number and nature of SLOs in each topic in classes IX and X. This will serve as a guide in the construction of the examination paper. It also indicates that more emphasis has been given to Understanding (41% and 38%), Application and higher order skills (29% and 37%) to discourage rote memorization. Tables 1 and 4 however do not translate directly into marks.
- 4.2 There will be two examinations, one at the end of Class IX and one at the end of Class X.
- 4.3 In each class, the theory paper will be in two parts: paper I and paper II. Both papers will be administered within 3 hours.

- 4.4 Paper I theory will consist of 25 compulsory, multiple choice items. These questions will involve four response options.
- 4.5 Paper II theory will carry 50 marks and consist of a number of compulsory, structured questions and a number of extended response questions. Each extended response question will be presented in an either/or form.
- 4.6 All constructed response questions will be in a booklet which will also serve as an answer script.

5. Teaching-Learning Approaches and Classroom Activities

- 5.1 The study of geography should promote the skills/qualities of creativity, curiosity, engagement with other points of view and a sympathetic understanding of our culture and geographical world views.
- 5.2 To achieve these outcomes the following strategies are recommended:
 - (a) active involvement of students should be encouraged by way of role play, small group discussion and debates.
 - (b) use of pictures and illustrations should be an important part of the teaching methodology;
 - (c) students should be encouraged to research each topic for themselves, pooling ideas, information and opinion and trying to establish which sources are more trustworthy when conflicting information is discovered;
 - (d) newspapers should be scrutinized for evidence of bias with attempts to give historical explanations of these biases;
 - (e) preparation of charts and reading of maps should;
 - (f) writing reports on visits to important geographical entities to be done.
- 5.3 The following teaching methods may be equally distributed across the working days or periods.
 - (a) field trips to geographical sights
 - (b) discussions/question-answer sessions
 - (c) role playing
 - (d) declamation/debates
 - (e) preparation of models, charts

6. Recommended Texts and Reference Materials

Recommended Book

1. Punjab Textbook Board. (2007). *Physical and Regional Geography for Classes IX and X*. Lahore: Punjab Textbook Board.

Reference Books

1. Ahmed, R. Z. (1998). *The Environment of Pakistan*, (Vol II). Lahore: Ferozsons (Pvt) Ltd.
2. Sethi, H. N. (2003). *The Environment of Pakistan* (2nd Ed). Malaysia: Peak Publishing.
3. Bhatti, A. K. (1995). *The Holy Quran on Environment, Gul e Janat*. Karachi: Royal Book Company.
4. Strahler, A. (1973). *Physical Geography*. New Jersey: John Wiley and Sons.
5. Dasgupta, A. (1993). *Physical Geography*, New Delhi: S. Chand and Company.
6. Lake, P. (1949). *Physical Geography*. Cambridge: Cambridge University Press.
7. Smith, N. (2007). *Pakistan: History, Culture and Government for O level*. Karachi: Oxford University Press.
8. Pallister, J. (2007). *Environmental Management for O level*. Karachi: Oxford University Press.

Additional Reference Books

1. Singh, Gopal. (1999). *Practical Geography*. Delhi: Vikas Publishing House.
2. Hussain, Colonel Mumtaz. (1998). *Environmental Degradation Realities and Remedies*. Lahore: Ferozsons (Pvt) Ltd.
3. Khan, Dr. Fazle Karim. (2002). *Pakistan: Geography, Economy and People*. Karachi: Oxford University Press.

Websites

Topic 1

1. <http://www.thefreedictionary.com/Geography>
2. <http://www.infoplease.com/ce6/world/A0858356.html>
3. <http://www.geog.buffalo.edu/~naumov/TA/GEO101/Lectures/Lecture1/notes1.html#1.%20Fundamental%20questions%20of%20physical%20geography>
4. <http://www.the-solar-system.net/>

Topic 2

5. <http://www.map-reading.com/>

Topic 3

6. <http://zebu.uoregon.edu/~soper/Earth/earthstructure.html>
7. <http://www.fi.edu/fellows/fellow1/oct98/create/>

Topic 4

8. <http://www.enchantedlearning.com/subjects/ocean/>

Topic 5

9. <http://csep10.phys.utk.edu/astr161/lect/earth/atmosphere.html>
10. [http://ww2010.atmos.uiuc.edu/\(Gh\)/guides/mtr/cld/cldtyp/home.rx](http://ww2010.atmos.uiuc.edu/(Gh)/guides/mtr/cld/cldtyp/home.rx)

Topic 6

11. http://www.michigan.gov/scope/0,1607,7-155-13497_13503_13507-44007--,00.html
12. <http://www.coursework.info/i/6419.html>

Topic 7

13. http://www2.una.edu/geography/statedepted/lessons/settlements/why_are_they_there.htm#Overview%20of%20Lesson

Topic 8

14. <http://www.eia.doe.gov/emeu/cabs/pakenv.html>
15. www.pdg.org.pk/NatResint.htm

Topic 9

16. www.pdg.org.pk/Health.htm
17. www.adb.org/Gender/pak.asp
18. www.akdn.org/agency/akhswork.html

7. Definition of Cognitive Levels and Command Words in the Student Learning Outcomes and in Examination Papers

7.1 Definition of Cognitive Levels (Knowledge, Understanding and Application)

Knowledge:

This requires knowing and remembering facts and figures, vocabulary and contexts, and the ability to recall key ideas, concepts, trends, sequences, categories, etc. It can be taught and evaluated through questions based on: who, when, where, what, list, define, describe, identify, label, tabulate, quote, name, state, etc.

Understanding:

This requires understanding information, grasping meaning, interpreting facts, comparing, contrasting, grouping, inferring causes/reasons, seeing patterns, organizing parts, making links, summarizing, solving, identifying motives, finding evidence, etc. It can be taught and evaluated through questions based on: why, how, show, demonstrate, paraphrase, interpret, summarize, explain, prove, identify the main idea/theme, predict, compare, differentiate, discuss, chart the course/direction, report, solve, etc.

Application:

This requires using information or concepts in new situations, solving problems, organizing information and ideas, using old ideas to create new ones, generalizing from given facts, analyzing relationships, relating knowledge from several areas, drawing conclusions, evaluating worth, etc. It can be taught and evaluated through questions based on: differentiate, analyze, show relationship, propose an alternative, prioritize, give reasons for, categorize, illustrate, corroborate, compare and contrast, create, design, formulate, integrate, rearrange, reconstruct/recreate, reorganize, predict consequences etc.

7.2 Definition of Command Words:

Knowledge

Collect:	Together specimens or information about places, events and arrange them in a meaningful way.
Define:	Only a formal statement or equivalent paraphrase is required. No examples need to be given unless specifically asked for.
Explain/ Account for:	The emphasis is on how one thing relates to another and some indication of which causes the other or whether there is a third factor that causes both.
Locate (and name):	Enter an appropriate symbol on a blank map or find an unnamed feature on given map, e.g. an escarpment on a relief map. Where information is to be inserted, choice of symbol as well as position will be important. The accuracy of position will be a judgement of the naked eye, i.e. approximate.
Name:	Mention the commonly used word for an object.
State:	Invites a concise answer with little or no supporting argument, for example, a name from memory or a map reference that can be obtained by inspection.
Write:	To recall the facts and explanation as given or provided in the text.

Understanding

Classify:	Put things or actions together in groups on the basis of stated features which they have in common. The common features will normally be stated in the question.
Compare:	List the main characteristics of two entities clearly identifying similarities (and differences).

Describe:	Expects a response in words though supporting sketches and diagrams may be used where appropriate. Full credit will be given when the verbal description uses the technical terms of Geography.
Differentiate/ Distinguish:	Identify and describe those characteristics which always or usually help us to tell two categories apart. Normally a list of features which (a) always and (b) usually differentiate is all that is required.
Discuss:	Expects an analytic account of the topic. There should be an introductory sentence/paragraph introducing the topic. Related material should be presented in paragraphs and there should be a concluding paragraph drawing together the main points usually in a statement of relationship or principle.
Elaborate:	Provide relevant details to clarify or enrich given statements or definitions, with examples.
Identify:	Pick out a specific instance of a general class or category in given information.
Read a map:	Derive information from a map relating to distance, height, direction, location. In relief and weather maps, the relative position of contours or isobars is particularly significant and candidates will be expected to be familiar with frequently occurring patterns.
Recognize:	Involves looking at a given example and stating what it most probably is.

Application

Apply:	Implies using the available information in different contexts to relate and draw conclusions.
Analyse:	Go beyond the information about an issue to group common characteristics together, say what they have in common and how they relate to each other, usually as causes and consequences. An analysis will be written in whole sentences and may usefully be accompanied by explanatory diagrams which will gain additional marks.
Compare and Contrast:	Make a judgment of whether similarities or differences are more important and construct at least three sentences/paragraphs setting out similarities, differences and an overall conclusion.

**Illustrate/
Draw:**

Normally an outline shape is all that is required. There are no marks for artistry but where relevant some indication of scale or a key will be rewarded.

Interpret:

State in words the explicit information and the implications of a graph, diagram or map.

SSC Scheme of Studies³

AKU-EB as a national board offers SSC and HSSC qualifications for both English and Urdu medium schools. The revised SSC Scheme of Studies issued by the Curriculum Wing was implemented from September 2007. Accordingly, each SSC subject will be taught across both the classes IX and X. The Science and Humanities group subjects are offered at SSC level. The marks allocated to subjects in the revised National Scheme of Studies of September 2007 have been followed.

SSC I and II (Class IX and X) subjects on offer for examination

SSC Part-I (Class IX) Science Group

Subjects	Marks			Medium
	Theory	Practical	Total	
English Compulsory-I	75	-	75	English
Urdu Compulsory-I OR Urdu Aasan ^a OR History and Geography of Pakistan-I ^b	75	-	75	Urdu Urdu English
Islamiyat-I OR Ethics-I ^c	*30	-	*30	English / Urdu
Pakistan Studies-I	*45	-	*45	English / Urdu
Mathematics-I	75	-	75	English / Urdu
Physics-I	65	10	75	English / Urdu
Chemistry-I	65	10	75	English / Urdu
Biology-I OR Computer Science-I	65	10	75	English / Urdu English
Total:	*495	30	*525	

SSC Part-II (Class X) Science Group

Subjects	Marks			Medium
	Theory	Practical	Total	
English Compulsory-II	75	-	75	English
Urdu Compulsory-II OR Sindhi ^a OR History and Geography of Pakistan-II ^b	75	-	75	Urdu Sindhi English
Islamiyat-II OR Ethics-II ^c	*45	-	*45	English / Urdu
Pakistan Studies-II	*30	-	*30	English / Urdu
Mathematics-II	75	-	75	English / Urdu
Physics-II	65	10	75	English / Urdu
Chemistry-II	65	10	75	English / Urdu
Biology-II OR Computer Science-II	65	10	75	English / Urdu English
Total:	*495	30	*525	

- a. Candidates from the province of Sindh may appear in "Urdu Aasan" in SSC Part I and in "Sindhi" in Part II examination.
- b. Foreign students may opt HISTORY and GEOGRAPHY OF PAKISTAN in lieu of Urdu Compulsory, subject to the Board's approval.
- c. For non-Muslim candidates only.
- * The above will be implemented in
SSC Part I 2013 Examinations and onwards
SSC Part II 2014 Examinations and onwards

³ Government of Pakistan September 2007. *Scheme of Studies for SSC and HSSC (Classes IX-XII)*. Islamabad: Ministry of Education, Curriculum Wing.

SSC Part-I (Class IX) Humanities Group

Subjects	Marks	Medium
English Compulsory-I	75	English
Urdu Compulsory-I OR Urdu Aasan ^a OR History and Geography of Pakistan-I ^b	75	Urdu Urdu English
Islamiyat-I OR Ethics-I ^c	*30	English / Urdu
Pakistan Studies-I	*45	English / Urdu
General Mathematics-I	75	English / Urdu
Any three of the following Elective Subjects	225 (75 each)	
1. **Geography-I		English / Urdu
2. General Science-I		English / Urdu
3. Computer Science-I (65+10 practical)		English
4. Economics-I		English / Urdu
5. Civics-I		English / Urdu
6. **History of Pakistan-I		English / Urdu
7. **Elements of Home Economics-I		English / Urdu
8. **Food and Nutrition-I (65+10 practical)		English / Urdu
9. **Art & Model Drawing-I		English
10. **Business Studies-I		English
11. **Environmental Studies-I		English
Total:	*525	

SSC Part-II (Class X) Humanities Group

Subjects	Marks	Medium
English Compulsory-II	75	English
Urdu Compulsory-II OR Sindhi ^a History and Geography of Pakistan-II ^b OR	75	Urdu Sindhi English
Islamiyat-II OR Ethics-II ^c	*45	English / Urdu
Pakistan Studies-II	*30	English / Urdu
General Mathematics-II	75	English / Urdu
Any three of the following Elective Subjects	225 (75 each)	
1. **Geography-II		English / Urdu
2. General Science-II		English / Urdu
3. Computer Science-II (65+10 practical)		English
4. Economics-II		English / Urdu
5. Civics-II		English / Urdu
6. **History of Pakistan-II		English / Urdu
7. **Elements of Home Economics-II		English / Urdu
8. **Food and Nutrition-II (65+10 practical)		English / Urdu
9. **Art & Model Drawing-II		English
10. **Business Studies-II		English
11. **Environmental Studies-II		English
Total:	*525	

SSC Part-I and Part-II (Class IX-X) (Additional Subjects)

SSC Part I	SSC Part II	Marks	Medium
1. **Literature in English-I ^d	1. **Literature in English-II ^d	75 each	English
2. **Commercial Geography-I ^d	2. **Commercial Geography-II ^d		English
3. **Additional Mathematics-I ^d	3. **Additional Mathematics-II ^d		English

a. Candidates from the province of Sindh may appear in "Urdu Aasan" in SSC Part I and in "Sindhi" in Part II examination.

b. Foreign students may opt HISTORY and GEOGRAPHY OF PAKISTAN in lieu of Urdu Compulsory, subject to the Board's approval.

c. For non-Muslim candidates only.

d. Subject will be offered as Additional Subject.

* The above will be implemented in

SSC Part I 2013 Examinations and onwards

SSC Part II 2014 Examinations and onwards

****These subjects are offered ONLY in the May examination.**