

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

PREAMBLE

This examination syllabus is based on the assumption that not less than **four** teaching periods or 2 hours 40 minutes per week will be allocated to the subject during the Senior Secondary School Course.

AIMS AND OBJECTIVES

The examination will test the candidates' ability to

- (i) understand the concepts of differential character and the spatial relationships of the surface features of the earth;
- (ii) understand the concept of man-environment relations (i.e. to examine the life of man within his physical and cultural environments and to explain their interactions);
- (iii) acquire a basic knowledge of the nature and functioning of physical and human environments, particularly an understanding of their inter-relationships and the resulting issues;
- (iv) organize and formulate principles according to acquired geographical concepts and to apply these principles to interpret and analyse spatial problems in the immediate and wider environments;
- (v) develop skills and techniques for accurate, orderly and objective geographical investigations to be carried out both in the classroom and in the immediate environment.

RUBRICS AND EXAMINATION SCHEME

There will be two papers; Paper 1 and Paper 2, both of which must be taken.

PAPER 1: GENERAL GEOGRAPHY, ELEMENTS OF PRACTICAL AND PHYSICAL GEOGRAPHY. This will be a 2-hour and 40 minutes paper, consisting of two sections; A and B.

SECTION A: General Geography

This will be a fifty (50) minutes multiple-choice (objective) test consisting of fifty (50) questions drawn to cover the entire Geography syllabus (except elementary surveying). Candidates will be required to attempt all the questions.

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

SECTION B: Elements of Practical and Physical Geography

This will be a 1 hour and 50 minutes paper, consisting of eight (8) questions, of which candidates are expected to answer four. Question 1 will be a compulsory structured question on map reading and interpretation. Candidates are advised not to spend more than 30 minutes on this question.

Candidates will be expected to bring graduated rulers (both metric and imperial), a complete mathematical set, a piece of string and a simple non-programmable calculator.

PAPER 2: HUMAN AND REGIONAL GEOGRAPHY

This will be a 2-hour essay-type paper, consisting of three sections A, B, and C. Candidates will be required to attempt four questions out of nine, choosing at least one from each section.

SECTION A: Human Geography

This will consist of three essay-type questions. Candidates will be required to attempt at least one of them.

SECTION B: Regional Geography of Candidates' Home Country

This will consist of three essay-type questions. Candidates will be required to attempt at least one of them.

SECTION C: Geography of Africa

This will consist of three essay-type questions. Candidates will be required to attempt at least one of them.

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

DETAILED SYLLABUS

CONTENTS	NOTES
ELEMENTS OF PRACTICAL AND PHYSICAL GEOGRAPHY	
Map Work	Map reading and interpretation based on a contoured survey map of part of West Africa: scale, measurement of distances, direction and bearing, map reduction and enlargement, identification of physical features such as spurs, valleys, etc. and cultural features such as city walls, settlements, communication routes etc.; measurement of gradients, drawing of cross profiles, inter-visibility, description and explanation of drainage, pattern of communication, settlement and land use.
Elementary Surveying	Chain and Prismatic compass, open and closed traverse, avoiding obstacles in the field.
Statistical Maps and Diagrams	Graphical representation of statistical data: bar graphs, line graphs, flow charts, pie charts, dot maps, proportional circles, density maps, isopleth maps.
Elements of Physical Geography	The earth as a planet in relation to the sun. Latitude, longitude and time. Structure of the earth (internal and external).
(i) Rocks	Types, characteristics, formation and uses.
(ii) Major landforms	Mountains, plateau, plains, karst and coastal landforms. Agencies modify landforms such as weathering, running water, underground water, wind and waves. Fieldwork covering local landforms such as coastal features, drainage features, gullies, etc.
(iii) Oceans	Ocean basins, salinity, ocean currents (causes, types and effects on the climates of coastlands), water as an environmental resource.
(iv) Weather and climate	Simple weather study based on local observation, description of the Stevenson's screen and uses of basic weather instruments e.g. rain gauge, thermometer, barometer, and wind vane, etc.

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

CONTENTS	NOTES
(v) Elements of climate	Temperature, pressure, wind and precipitation and the factors affecting them e.g. altitude, latitude, ocean currents, land-and-sea breezes, continentality and aspect. Interpretation of climatic charts and data. Classification of climate (Greek and Koppen's). Major types of climate (Hot climate – equatorial, tropical and desert, temperate climate – warm and cool). The atmosphere as an environmental resource.
(vi) Soils	Definition, local types and characteristics. Factors and processes of soil formation and soil profile. Tropical soil types. Importance to man and the effects of human activities on soil.
(vii) Vegetation	Major types (tropical rain-forest, cool temperate woodland, tropical grassland and temperate grassland); characteristics, distribution, factors affecting their distribution, plant communities. Vegetation as an environmental resource.
(viii) Aspects of Environmental Interaction	Land ecosystem, environmental balance and intervention within the natural environment.
(ix) Environmental hazards	Soil erosion, drought, desert encroachment, deforestation and pollution, causes, effects and prevention of each.
HUMAN GEOGRAPHY	
(i) World Population	Factors and patterns of growth, distribution and movement; growth rate problems (e.g. Amazon Basin, N.E. of U.S.A., India, Japan, West Coast of South Africa).
(ii) Settlement	Types (rural and urban); patterns and factors affecting location; growth and size; functions of rural and urban settlements (e.g. Western Europe, the Middle East and West Africa).
(iii) Transportation	Types (roads, railways, water, air). Transportation and economic development (movement of people and commodities, national and international trade, diffusion of ideas and technology, national integration); problems of transportation.

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

CONTENTS	NOTES
(iv) Manufacturing Industry	Types (heavy and light industry); Factors of industrial location; contributions to Gross National Product (G.N.P.) and problems.
(v) World Trade	Factors, major commodities (agricultural, manufactured goods and mineral products); world trade routes, with special emphasis on trade between the candidate's home country and the outside world.
REGIONAL GEOGRAPHY OF NIGERIA	<p>Nigeria on broad outlines (location, position, size, political divisions, physical setting, population, distribution of mineral and power resources, agriculture, industry and commerce, transportation).</p> <p>Geographical Regions of Nigeria (Eastern Highlands, Eastern Scarplands, North-central Highlands, Western Highlands, Sokoto Plains, Chad Basin, Niger-Benue Trough, Cross River Basin and Southern Coastlands).</p> <p>Each of these geographical regions should be treated under the following sub-headings:-</p> <ul style="list-style-type: none"> (i) physical setting; (ii) peoples and population; (iii) resources and economic activities; (iv) transportation; (v) problems of development.
REGIONAL GEOGRAPHY OF GHANA	<ul style="list-style-type: none"> (a) Size and location (within West Africa), administrative structure. (b) Physical environment (geology, relief, drainage, climate, vegetation and soils). (c) Population: Size, growth, distribution and density; age/sex structure; fertility, morbidity and mortality, migration. (d) Settlements: Origin, types (rural – urban), characteristics, hierarchy, landuse, urbanisation processes problems and attempts at solving some of the problems). (e) Agriculture: Subsistence (intensive and extensive), commercial (vegetable, livestock, dairying, commercial grain); plantation, problems and prospects.

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

CONTENTS	NOTES
<p>REGIONAL GEOGRAPHY OF SIERRA LEONE</p>	<p>(f) Fishing: Inland and ocean (in-shore/off-shore), methods, types of fish, storage and marketing, problems and prospects.</p> <p>(g) Lumbering: Sources of timber, methods of exploitation, types of species (for internal use and for export), problems and prospects, conservation.</p> <p>(h) Mining: Types, distribution, methods of extraction, problems and prospects.</p> <p>(i) Manufacturing: Types, distribution, factors influencing location of industries, problems of industrialization.</p> <p>(j) Trade and Commerce: Services, transport and communication, recreation and tourism, administration.</p> <p>(k) Energy and Power: Water (Akosombo and Kpong Hydro-electric Power projects - benefits and effects), fuelwood and charcoal, Petroleum and Natural gas (Saltpond), Solar, Wave, Wind energies (Donkokrom and Kokrobite), Biogas e.g. cow dung.</p> <p>(l) Issues of Development and Environmental Conservation: Rural and regional development, resource management and conservation, environmental pollution e.g. air, water, soil, noise, waste disposal.</p> <p>Sierra Leone on Broad Outlines Size and location, physical environment, population and settlements.</p> <p>Primary Economic Activities Agriculture, fishing, lumbering, mining and quarrying, relative importance of each activity, problems, prospects and conservation.</p> <p>Manufacturing Location of industry, types of industry, problems of manufacturing industry, Energy and Power, water, fuelwood and charcoal, biogas (e.g. cow-dung), hydro-electric power projects e.g. Dodo, Guma, Bumbuna (under construction).</p>

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

CONTENTS	NOTES
REGIONAL GEOGRAPHY OF SENEGAMBIA	<p>Transport and Communication Roads, water, air, the role of transport and communication in economic development (i.e. movement of people and commodities) internal and external trade, diffusion of ideas and technology): problems of transport and communication.</p> <p>Trade and Tourism Major commodities of trade (agricultural, manufactured goods, minerals, etc.): pattern of trade (internal and external): problems of trade; development of tourism, problems of tourism, socio-economic effects of tourism.</p> <p>(a) Size and location, physical environment – relief, drainage, climate and vegetation.</p> <p>(b) Economic activities – Farming (subsistence and cash crops), fishing, livestock rearing, mining, problems and prospects.</p> <p>(c) Population – Size, growth, distribution and migration.</p> <p>(d) Manufacturing – Types, location, factors influencing location, problems of industrialization.</p> <p>(e) Transport and Communication – road, water, rail and air transport – their roles in economic development.</p> <p>(f) Tourism – Main tourism areas, factors responsible for its development, problems and economic importance.</p>
	<p>FIELDWORK</p> <p>Fieldwork on any one of the following topics should be based on local geography of candidate's home country (This aspect of the syllabus should be examined by schools as part of the continuous assessment and should account for 25% of the total mark allotted to continuous assessment):</p> <p>(i) Land use (rural or urban): rural – crop farming (e.g. rice, cocoa, etc)., mining (e.g. coal, tin, petroleum, etc.) fishing.</p>

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

CONTENTS	NOTES
<p>GEOGRAPHY OF AFRICA</p> <p>SELECTED TOPICS</p>	<p>urban – commercial activities, ports, factories, recreational, etc.</p> <p>(ii) Market survey – rural or urban.</p> <p>(iii) Traffic flow – rural or urban.</p> <p>(iv) Patterns of journey to work – rural or urban.</p> <p>(v) Rate of erosion in the locality, etc.</p> <p>Africa on broad outlines – location, size, position, political divisions and associated islands, physical setting (relief, drainage, climate and vegetation); distribution of major minerals.</p> <p>(a) Lumbering in equatorial Africa (with particular reference to Cote d'Ivoire and Zaire).</p> <p>(b) Irrigation agriculture in the Nile Basin and the Niger Basin.</p> <p>(c) Plantation agriculture in West and East Africa.</p> <p>(d) Fruit farming in the Mediterranean Regions of Africa.</p> <p>(e) Gold mining in South Africa.</p> <p>(f) Copper mining in Zaire and Zambia.</p> <p>(g) Oil production in Nigeria, Algeria and Libya.</p> <p>(h) Population distribution in West Africa.</p> <p>(i) International Economic Co-operation in West Africa (e.g. ECOWAS).</p>

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

SUGGESTED READING LIST

S/N	AUTHOR	TITLE	PUBLISHER
1.	T.E. HILTON	Practical Geography in Africa	Longman
2.	D.A. NIMAKO	Map Reading for West Africa	Longman
3.	A. OGUNSEYE & A. FANIRAN	Map Reading and Interpretation for West Africa	
4.	MONKHOUSE, F.J. & H.R. WILKINSON	Maps and Diagrams	Methuen & Co. Ltd.
5.	BYGOTT JOHN & D.C. MONEY	An Introduction to Mapwork & Practical Geography	University Tutorial Press
6.	PRITCHARD, J.M.	Practical Geography for Africa	Longman
7.	GOSS, W.E.	Surveying	Macmillan
8.	DOTSE, J. M.	Practical Geography (Mapwork)	Univ. of Cape Coast
9.	J. WILLMER & OKOYE	Map Reading and Interpretation	African University Press
10.	R.B. BUNNETT & P.O. OKUNROTIFA	General Geography in Diagrams for West Africa	Longman
11.	B. O. ADELEKE & G.C. LEONG	Certificate Physical and Human Geography (West African Edition)	Oxford
12.	A. FANIRAN & O. OJO	Man's Physical Environment	Heinemann
13.	STRAHLER, A.N.	Introduction to Physical Geography	Wiley International Ed.
14.	MONKHOUSE, F. J.	Principles of Physical Geography	University of London
15.	GATES	Climatology and Meteorology	
16.	SMALL, R. J.	The Study of Landforms	Cambridge Univ. Press

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

S/N	AUTHOR	TITLE	PUBLISHER
17.	PATTON CLYDE et AL	Physical Geography	Wadworth Publishing Co.
18.	ALISTAIR F. PITTY	Introduction of Geomorphology	Methuen and Co. Ltd
19.	DICKSON, J.P. et AL	A Geography of the Third World	Longman
20.	ADEJUMO, J. C.	An Introduction to the Geography of the Tropics	Nelson & Sons Ltd.
21.	GILMOR, D. A.	Socio-Economic Geography	Gil and Macmillan Ltd.
22.	UDO, REUBEN K.	The Human Geography of Tropical Africa	Educational Books, Nigeria
23.	UDO, REUBEN K.	Comprehensive Geography of Tropical Africa	Longman
24.	UDO, REUBEN K.	Geographical Regions of Nigeria	Longman
25.	N. P. ILOEJE	A New Geography of Nigeria (New Edition)	Longman
26.	M. A. ABEGUNDE et AL	Senior Secondary Geography Series (1 – 3)	Longman
27.	P. O. OKUNROTIFA & MICHAEL SENIOR	A Regional Geography of Africa (New Edition)	Longman
28.	BARBOUR K. M., OGUNTOYINBO J.S., ONYEMELUKWEI, J., & NWAFOR, J.C.	Nigeria in Maps	Hodder & Stoughton
29.	DICKSON K.B. & BENNEH G.	New Geography of Ghana	Ghana Univ. Press
30.	ENGMANN, E.V.T.	A population Geography of Ghana 1850 – 1960	Ghana Univ. Press
31.	DICKSON & ACHEAMPONG	Geography for Senior Secondary Schools in Ghana	Ghana Education Service
32.	OBOLI, H.O.N.	An Outline Geography of West Africa	Harrap & Company

WEST AFRICAN SENIOR SCHOOL CERTIFICATE EXAMINATION
GEOGRAPHY

S/N	AUTHOR	TITLE	PUBLISHER
33.	J. I. CLARKE	Sierra Leone in Maps	Hodder & Stoughton
34.	GWYN-JONES	A New Geography of Sierra Leone	Longman
35.	PRITCHARD, J. M.	Africa	Longman
36.	M. DUZE & AFOLABI OJO	Macmillan Senior School Atlas	Macmillan
37.	COLLINS	New Secondary Atlas	Longman
38.	PHILIPS	World Atlas	
39.	CLARY AUDREY N.	Longman Dictionary of Geography (Human and Physical)	Longman
40.	MOORE, W. E.	A Penguin Dictionary of Geography	
41.	HAYWARD, & OGUNTOYINBO J.S.	Climatology of West Africa	