

GEOGRAPHY

GENERAL OBJECTIVES

The aim of the Unified Tertiary Matriculation Examination (UTME) syllabus in Geography is to prepare the candidates for the Board's examination. It is designed to test their achievement of the course objectives, which are to:

1. handle and interpret topographical maps, statistical data and diagrams and basic field survey;
2. demonstrate knowledge of man's physical and human environment and how man lives and earns a living on earth surface with special reference to Nigeria and Africa;
3. show understanding of the interrelationship between man and his environment;
4. apply geographical concepts, skills and principles to solving problems.

DETAILED SYLLABUS

TOPICS/CONTENTS/NOTES	OBJECTIVES
I. PRACTICAL GEOGRAPHY <ol style="list-style-type: none"> a. Scale and measurement distances, areas reduction and enlargement, directions, bearings and gradients with reference to topographical maps. b. Map reading and interpretation; drawing of cross profiles, recognition of intervisibility, recognition and description of physical and human features and relationship as depicted on topographical maps. c. Interpretation of statistical data; maps and diagrams d. Elementary Surveying chain and prismatic, open and close traverse, procedure, problems, advantages and disadvantages. 	<p>Candidates should be able to:</p> <ol style="list-style-type: none"> ai apply the different types of scale to distances and area measurement; ii apply the knowledge of scale to gradients, map reduction and enlargement; bi illustrate the relief of an area through profile drawing; ii interpret physical and human features from topographical maps. ci Compute quantitative information from statistical data, diagrams and maps, ii. interpret statistical data, diagrams and maps. di. analyse the principle and procedure of each technique; ii. compare the advantages of the two techniques.

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<p>II. PHYSICAL GEOGRAPHY</p> <p>a. The earth as a planet</p> <p>i. The earth in the solar system, rotation and revolution;</p> <p>ii. The shape and size of the earth</p> <p>iii. Latitudes and distances, longitudes and time;</p> <p>iv. The structure of the earth (internal and external).</p> <p>b. Rocks</p> <p>i Types and characteristics</p> <p>ii Modes of formation</p> <p>iii Uses of rocks</p> <p>c Landforms</p> <p>i processes; earth movements (faulting, folding, earthquakes, volcanicity), erosion, transportation and deposition.</p> <p>ii Modifying agents; water (surface and Underground) wind and sea waves;</p> <p>iii Types of landforms associated with the Processes and agents specified above (Karst topography, plains fold mountains, faulted landforms, volcanic mountains, deltas, river terraces, barchans seifs and zeugens).</p> <p>d. Water Bodies</p> <p>i. Oceans and seas (world distribution, salinity and uses);</p>	<p>Candidates should be able to:</p> <p>ai identify the relative positions of the planets in the solar system;</p> <p>ii relate the effects of the rotation to the revolution of the earth;</p> <p>iii provide proof for the shape and size of the earth;</p> <p>iv differentiate between latitude and longitude;</p> <p>v relate latitude to calculation of distance;</p> <p>vi relate longitude to calculation of time;</p> <p>vii compare the internal and external components of the earth.</p> <p>bi differentiate between major types of rocks and their Characteristics;</p> <p>ii analyse the processes of formation and the resultant features;</p> <p>iii indicate the uses of rocks.</p> <p>ci distinguish between the internal and the external processes of landforms development;</p> <p>ii identify the agents of denudation;</p> <p>iii associate landforms with each process and agent.</p> <p>di locate oceans and seas on the globe;</p> <p>ii examine the characteristics and uses of Ocean and seas;</p>

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<ul style="list-style-type: none"> ii Ocean currents – types, distribution, causes and effects; iii Lakes – types, distribution and uses. 	<ul style="list-style-type: none"> iii classify the types of ocean currents; iv account for the distribution of ocean currents; v evaluate the causes and effects of ocean currents; vi identify the types and location of lakes; vii indicate the characteristics and uses of lakes
<p>e Weather and Climate</p> <ul style="list-style-type: none"> i Concept of weather and climate ii Elements of weather and climate iii Factors controlling weather and climate (pressure, air, mass, altitude, continentality and winds); iv Classification of climate (Greek and Koppen). v Major climate types (Koppen), their Characteristics and distribution. vi Measuring and recording weather parameters and instruments used. 	<ul style="list-style-type: none"> ei differentiate between weather and climate; ii differentiate between the elements of weather and climate; iii isolate the factors controlling weather and climate; iv compare Koppen's and Greek's classifications v identify the major types of climate according to Koppen; vii relate the weather instruments to their uses.
<p>f Vegetation</p> <ul style="list-style-type: none"> i Factors controlling growth of plants ii The concept of vegetation e.g. plant communities and succession iii Major types of vegetation, their characteristics and distribution, iv Impact of human activities on vegetation. 	<ul style="list-style-type: none"> fi trace the factors controlling the growth of plants; ii analyse the process of vegetation development; iii identify the types, their characteristics and distribution; iv assess the impact of human activities on vegetation;
<p>g Soils</p> <ul style="list-style-type: none"> i. Definition and properties ii. Factors and processes of formation iii. Soil profiles iv. Major tropical types, their characteristics, distribution and uses; 	<ul style="list-style-type: none"> gi classify soils and their ii. properties; ii. isolate the factors of formation; iii. differentiate between the different types of soil horizons and their characteristics;

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<p>v. Impact of human activities on soils.</p> <p>h Environmental Resources;</p> <p>i Types of resources (atmospheric, land, soil, Vegetation and minerals);</p> <p>ii The concept of renewable and non-renewable resources;</p> <p>I Environmental interaction:</p> <p>i Land ecosystem</p> <p>ii Environmental balance and human interaction</p> <p>j Environmental: hazards</p> <p>i. Natural hazards (droughts, earth-quakes, volcanic eruptions, flooding)</p> <p>ii. Man-induced (soil erosion, Deforestation, pollution, flooding Desertification)</p> <p>iii. Effects, prevention and control of hazards.</p> <p>III. HUMAN GEOGRAPHY</p> <p>a. Population</p> <p>i. World population with particular reference to the Amazon Basin, N.E.</p>	<p>iv. compare the major tropical soil types and uses of soils;</p> <p>v. account for the distribution and uses of soils;</p> <p>vi. assess the impact of human activities on soils.</p> <p>hi. interpret the concept of environmental resources;</p> <p>ii. relate environmental resources to their uses;</p> <p>iii. differentiate between the concepts of renewable and non-renewable resources.</p> <p>Ii. identify the components of land ecosystem;</p> <p>ii. establish the interrelationship within the ecosystem;</p> <p>iii. interpret the concept of environmental balance;</p> <p>iv. analyse the effects of human activities on land ecosystem.</p> <p>ji identify the natural hazards and their causes</p> <p>ii. relate the human-induced hazards to their causes;</p> <p>iii. locate the major areas where they are common and their effects;</p> <p>iv. recommend possible methods of prevention and control.</p> <p>Candidates should be able to:</p> <p>ai. identify the characteristics of population (growth rates and structure);</p> <p>ii. determine the factors and the patterns of</p>

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<p>U.S.A., India, Japan and the West Coast of Southern African.</p> <p>ii. Characteristics – birth and death rates, ages/sex structure.</p> <p>iii. Factors and patterns of population distribution;</p> <p>iv. Factors and problems of population growth;</p> <p>b. Settlement with particular reference to Western Europe, Middle East and West Africa;</p> <p>i. Types and patterns: Rural and Urban, Dispersed, nucleated and linear;</p> <p>ii. Rural settlement: classification, factors of growth and functions;</p> <p>iii. Urban settlement – classification, factors for growth and functions.</p> <p>iv. Problems of urban centres</p> <p>v. Interrelationship between rural and urban settlements.</p> <p>c. Selected economic activities</p> <p>i. Types of economic activities: primary, secondary and tertiary;</p> <p>ii. Manufacturing industries, types, locational factors, distribution and socio-economic importance and problems of industrialization in tropical Africa.</p> <p>iii. Transportation and Communication types, roles in economic development and communication in tropical Africa.</p> <p>iv. World trade-factors and pattern of world trade, major commodities (origin, routes and destinations).</p>	<p>population distribution;</p> <p>iii. identify the factors and problems of population growth;</p> <p>iv. relate the types of migration to their causes and effects;</p> <p>v. account for the ways population constitute a resource.</p> <p>bi differentiate between types of Settlements;</p> <p>ii. classify the patterns and functions of rural settlements;</p> <p>iii. classify the patterns and functions of urban settlement;</p> <p>iv. establish the interrelationship between rural and urban settlements;</p> <p>ci. identify the types of economic activities;</p> <p>ii. differentiate between the types of economic activities;</p> <p>iii. compare the types of manufacturing industries;</p> <p>iv. identify the factors of industrial location;</p> <p>iii. examine the socio-economic importance of manufacturing industries;</p> <p>iv. give reasons for the problems of industrialization in tropical Africa;</p> <p>v. differentiate between the types and means of transportation and communication;</p> <p>vi. assess the economic importance of</p>

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<p>IV. REGIONAL GEOGRAPHY</p> <p>A. Nigeria</p> <p>a Broad outline</p> <p>i. Location, position, size, political division – (states) and peoples;</p> <p>ii Physical settling: geology, relief, landform, climate and drainage, vegetation and soils;</p> <p>iii Population: size, distribution, migration, (types, problems and effects);</p> <p>iv Natural Resources: types (minerals, soils, Water, vegetation etc) distribution, uses and Conservation;</p> <p>v. Agricultural Systems: the major crops produced, problems of agricultural development in Nigeria.</p> <p>vi. Manufacturing Industries: factors of location, types of products, marketing and problems associated with manufacturing;</p> <p>vii. Transportation and trade: modes of transportation and their relative advantages and disadvantages, regional and international trade.</p>	<p>transport and;</p> <p>vii. give reasons for the problems of transportation in tropical Africa;</p> <p>viii. relate the factors to the pattern of world trade.</p> <p>ix. classify the major commodities of trade in terms of their origins, routes and destination.</p> <p>Candidates should be able to:</p> <p>Ai describe the location, size and political Divisions of Nigeria.</p> <p>ii. identify the ethnic groups and their distributions;</p> <p>iii. relate the components of physical settings to their effects on human activities;</p> <p>iv. account for the pattern of population distribution;</p> <p>v. examine the types of migration, their problems and effects;</p> <p>vi. identify the types of natural resources and their distribution;</p> <p>vii. indicate their uses and conservation;</p> <p>viii. compare the farming systems practiced in Nigeria;</p> <p>ix. identify the crops produced and the problems encountered;</p> <p>x. identify the types and location of the major manufacturing industries;</p> <p>xi. determine the factors of industrial location and the problems associated with the industries;</p> <p>xii. establish the relationship between transport and trade;</p> <p>xiii. relate the modes of transportation to their relative advantages and</p>

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<p>b. Geographical Regions of Nigeria</p> <p>i Eastern Highlands;</p> <p>ii Eastern Scarpland;</p> <p>iii Northern Central Highland</p> <p>iv Western Highlands;</p> <p>v Sokoto Plains;</p> <p>vi. Niger-Benue trough;</p> <p>vii. Cross River Basin;</p> <p>viii Southern Coastland each region analysed under the following sub-headings: physical setting (relief, drainage etc) people, population and settlements, modes of exploitation of natural resources, transportation and problems of development.</p> <p>B. The Rest of Africa:</p> <p>a Africa on broad outline;</p> <p>i Location, size, position, political settings (relief, drainage, climate type, Vegetation type etc).</p> <p>ii. Distribution of major minerals</p> <p>b Selected Topics</p> <p>i Lumbering in equatorial Africa with particular reference to Cote d'voire (Ivory Coast) and the Democratic Republic of Congo.</p> <p>ii Irrigation Agriculture in the Nile and Niger Basin;</p>	<p>disadvantages;</p> <p>xiv. classify the major commodities of regional and international trade;</p> <p>bi. Identify each geographical region and its distinctive features;</p> <p>ii. identify the people of each region and the settlement pattern;</p> <p>iii. account for the mode of resource exploitation in each region;</p> <p>iv. examine the modes and problems of transportation in each region;</p> <p>v. give reasons for the problem of development in each region;</p> <p>vi. Suggest solutions.</p> <p>ai. Identify the location, size and political Division of Africa;</p> <p>ii. relate the components of the physical setting to the effect on human activities;</p> <p>iii describe the distribution of major minerals.</p> <p>bi analyse the factors that favour the Development of lumbering in the identified areas;</p> <p>ii. examine the methods and problem lumbering;</p> <p>iii. assess the economic importance of lumbering;</p> <p>iv. account for the reason for irrigation in the area;</p>

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<p>iii Plantation Agriculture in West and East Africa</p> <p>iv Fruit Farming in the Mediterranean Regions of Africa.</p> <p>v Mineral Exploitation</p> <ul style="list-style-type: none"> - Gold mining in South Africa - Copper mining in the Democratic Republic of the Congo - Crude oil production in Algeria and Libya <p>vi Population Distribution in West Africa</p> <p>vii International Economic Cooperation in West Africa, e.g. ECOWAS</p>	<p>v. compare the methods and major crops produced;</p> <p>vi. identify the problems associated with irrigation in the area;</p> <p>vii account for plantation agriculture and its requirements;</p> <p>viii. relate the methods of management to the crops produced;</p> <p>ix assess the economic importance of plantation agriculture;</p> <p>x identify the conditions that favour fruit farming in the area;</p> <p>xi relate the major areas of fruit farming to types of fruits produced;</p> <p>xii assess the economic importance and problems associated with fruit farming in the area;</p> <p>xiii proffer solutions to the problems;</p> <p>xiv identify the area of production and the method of mining each mineral in the specified country;</p> <p>xv relate the economic importance of the mineral to the region;</p> <p>xvi determine the problems of associated with the exploitation of the mineral in each country;</p> <p>xvii account for the pattern of population distribution in West Africa;</p> <p>xviii indicate the factors influencing the pattern of distribution;</p> <p>xix identify the member countries;</p> <p>xx examine the objectives for which ECOWAS was established;</p> <p>xxi evaluate the prospect and problems of the organization</p>

RECOMMENDED TEXTS

- Adeleke, B.O. and Leong, G.C. (1999). *Certificate Physical and Human Geography* (West African Edition), Ibadan: Oxford.
- Bradshaw, M. name(s)? (2004). *Contemporary World Regional Geography*, New York: McGraw Hill
- Bunet, R.B and Okunrotifa, P.O. (1999). *General Geography in Diagrams for West Africa*, China: Longman.
- Collins *New Secondary Atlas*, Macmillan
- Fellman, D. name(s)? (2005). *Introduction to Geography (Seventh Edition)* New York: McGraw Hill
- Getis, A. name(s)? (2004). *Introduction to Geography (Ninth Edition)* New York: McGraw Hill
- Iloeje, N. P (1999). *A New Geography of West Africa*, Hong Kong: Longman
- Iloeje, N.P (1982). *A New Geography of Nigeria (New Education)*, Hong Kong: London
- Nimaku, D.A. (2000). *Map Reading of West Africa*, Essex: Longman.
- Okunrotifa, P.O. and Michael S. (2000). *A Regional Geography of Africa (New Edition)*, Essex: London.
- Udo, R.K (1970). *Geographical Regions of Nigeria*, London: Longman.
- Waugh, D. (1995). *Geography an Integrated Approach (Second Edition)*, China: Nelson
- Wisdomline Pass at Once JAMB.