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, photographs, 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.

5. understand field work techniques and the study of a local area in the field.

DETAILED SYLLABUS

TOPICS/CONTENTS/NOTES	OBJECTIVES

I. PRACTICAL GEOGRAPHY A. Maps B. Scale and measurement distances, areas reduction and enlargement, directions, bearings and gradients with reference to topographical maps. C. 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. D. Interpretation of statistical data; maps and diagrams	Candidates should be able to: Ai define and identify different types and uses of maps Bi apply the different types of scale to distances and area measurement; ii apply the knowledge of scale to gradients, map reduction and enlargement; Ci illustrate the relief of an area through profile drawing; ii interpret physical and human features from topographical maps. Di Compute quantitative information from statistical data, diagrams and maps, ii. interpret statistical data, diagrams and maps.

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E. Elementary Surveying; chain and prismatic, open and close traverse, procedure, problems, advantages and disadvantages.	Ei. analyse the principle and procedure of each technique; ii. compare the advantages of the two techniques.
F. Geographic Information System (GIS): components, techniques, data sources, applications	Fi. Understand GIS and its uses. ii. Understand the computer system of data capturing and analysis iii. Express locations through the use of latitudes, longitudes, zipcodes etc. iv. Understand land surveying, remote sensing, map digitizing, map scanning as sources of data. v. Explain areas of use: Defense, Agriculture, Rural Development etc. vi. Identify problems with GIS in Nigeria.
II. PHYSICAL GEOGRAPHY	Candidates should be able to:
A The earth as a planet i. The earth in the solar system, rotation and revolution; ii. The shape and size of the earth iii. Latitudes and distances, longitudes and time;	Ai identify the relative positions of the planets in the solar system; ii relate the effects of the rotation to the revolution of the earth; iii provide proof for the shape and size of the earth; iv differentiate between latitudes and longitudes; v relate lines of latitude to calculation of distance; vi relate lines of longitude to calculation of time;
B The Earth Crust i. The structure of the earth (internal and external) Relationships among the four spheres.	Bi compare the internal and external components of the earth. ii. understand the existing relationship among atmosphere, biosphere in terms of energy balance and water cycle.

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ii. Rocks: Types, characteristics, modes of formation and uses iii. Earth's movement: Tectonic forces iv. Major Landforms: Mountains, Plateaux, Plains, Coastal landforms, karst topography and desert landforms	iii. differentiate between major types of rocks and their characteristics; iv. analyse the processes of formation and the resultant features; v. indicate the uses of rocks. vi. differentiate between tensional and compressional forces and the resultant landforms. vii. identify and describe the major landforms.
C. Volcanism and Earthquakes i. landforms associated with volcanic activities ii. landforms of Igneous Rocks iii. origin and types of Volcanoes iv. some volcanic eruptions and earthquakes.	Ci. explain the processes of volcanic eruptions and earthquakes ii. describe the different landforms associated with both volcanic eruptions and earthquakes. iii. give examples of major volcanic eruptions and earthquakes in the world.
D. Denudation processes in the tropics i. weathering ii. erosion iii. mass movement iv. deposition	Di. identify the agents of denudation ii. associate landforms with each process and agent.
E. Water Bodies i. Oceans and seas (world distribution, salinity and uses) ii Ocean currents – types, distribution, causes and effects; iii Lakes – types, distribution and uses. iv. Rivers: Action of running water.	Ei locate oceans and seas on the globe; ii. examine the characteristics and uses of oceans and seas; 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 viii. identify the landforms of the different stages of a river course.

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F. Weather and Climate 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. vii The basic science of climate change.	Fi. 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. viii define climate change ix understand the causes of climate change x understand the effects and remedies of climate change.
G Vegetation 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.	Gi 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;
H Soils i. Definition and properties ii. Factors and processes of formation iii. Soil profiles iv. Major tropical types, their characteristics, distribution and uses; v. Impact of human activities on soils.	Hi classify soils and their properties; ii. isolate the factors of formation; iii. differentiate between the different types of soil horizons and their characteristics; iv. compare the major tropical soil types and uses of soils; v. account for the distribution and uses of soils; vi. assess the impact of human activities on soils.

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I Environmental Resources; i Types of resources (atmospheric, land, soil, Vegetation and minerals) ii The concept of renewable and non-renewable resources;	Ii. interpret the concept of environmental resources; ii. relate environmental resources to their uses; iii. differentiate between the concepts of renewable and non-renewable resources.
J Environmental interaction: i Land ecosystem ii Environmental balance and human interaction	Ji. identify the components of land ecosystem; ii. establish the interrelationship within the ecosystem; iii. interpret the concept of environmental balance; iv. analyse the effects of human activities on land ecosystem.
K Environmental hazards: i. Natural hazards (droughts, earthquakes, volcanic eruptions, flooding) ii. Man-induced (soil erosion, deforestation, pollution, flooding and desertification) iii. Effects, prevention and control of hazards.	Ki identify the natural hazards and their causes; ii. relate the human-induced hazards to their causes; iii. locate the major areas where they are common and their effects; iv. recommend possible methods of prevention and control.
L Environmental Conservation	Li. Explain with examples environmental conservation ii discuss the different methods of environmental conservation. iii Explain the need/importance of environmental conservation

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III. HUMAN GEOGRAPHY A. Population i. World population with particular reference to the Amazon Basin, N.E. U.S.A., India, Japan and the West Coast of Southern Africa. ii. Characteristics – birth and death rates, ages/sex structure. iii. Factors and patterns of population distribution; iv . Factors and problems of population growth.	Candidates should be able to: Ai. Define different concepts of population; ii. identify the characteristics of population (growth rates and structure); iii. determine the factors and the patterns of population distribution; iv. identify the factors and problems of population growth; v. relate the types of migration to their causes and effects; vi. account for the ways population constitute a resource.
B Settlement with particular reference to Western Europe, the USA, Middle East and West Africa: i. Types and patterns: rural and urban, dispersed, nucleated and linear; ii. Rural settlement: classification, factors of growth and functions; iii. Urban settlement – classification, factors of growth and functions. iv. Problems of urban centres v. Interrelationship between rural and urban settlements.	Bi differentiate between types of settlements; (rural and urban) ii. classify the patterns and functions of rural settlements; iii. classify the patterns and functions of urban settlements; iv identify the problems of urban centres; v. establish the interrelationship between rural and urban settlements;
C Selected economic activities i. Types of economic activities: primary, secondary, tertiary and quartnary; ii. Agriculture: types, system, factors and problems iii. Manufacturing industries, types, locational factors, distribution and socio economic importance and problems of industrialization in tropical Africa.	Ci. identify the types of economic activities; ii. differentiate between the types of economic activities; iii. assess Agriculture as an economic activity; iv. compare the types of manufacturing industries; v. identify the factors of industrial location; vi. examine the socio-economic importance of manufacturing industries;

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iv. Transportation and Communication types, roles in economic development and communication in tropical Africa. v. World trade-factors and pattern of world trade, major commodities (origin, routes and destinations). vi. Tourism: definition, importance, location, problems and solutions.	vii. give reasons for the problems of industrialization in tropical Africa; viii. differentiate between the types and means of transportation and communication; ix. assess the economic importance of transport; x. give reasons for the problems of transportation in tropical Africa; xi. relate the factors to the pattern of world trade. xii. classify the major commodities of trade in terms of their origins, routes and destination. xiii. Analyse tourism as an economic activity.
IV. REGIONAL GEOGRAPHY A Broad outline of Nigeria i. Location, position, size, political division (states) and peoples; ii Physical settling: geology, relief, landform, climate and drainage, vegetation and soils; iii Population: size, distribution, migration, (types, problems and effects); iv Natural Resources: types (minerals, soils, Water, vegetation etc) distribution, uses and conservation.	Candidates should be able to: Ai describe the location, size and political divisions of Nigeria; ii. identify the ethnic groups and their distributions; iii. relate the components of physical settings to their effects on human activities; iv. account for the pattern of population distribution; v. examine the types of migration, their problems and effects; vi. identify the types of natural resources and their distribution; vii. indicate their uses and conservation;

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B. Economic and Human Geography: i. Agricultural Systems: the major crops produced, problems of agricultural development in Nigeria. ii. Manufacturing Industries: factors of location, types of products, marketing and problems associated with manufacturing; iii. Transportation and Communication: modes of transportation and communication and their relative advantages and disadvantages; iv. Trade: Regional and International Trade, advantages and disadvantages; v. Tourism: types, importance, problems and solutions. C. ECOWAS i. Meaning and objectives ii. Member states iii. Advantages and benefits iv. Disadvantages, problems and solutions.	Bi. compare the farming systems practiced in Nigeria; ii. identify the crops produced and the problems encountered; iii. identify the types and location of the major manufacturing industries; iv. determine the factors of industrial location and the problems associated with the industries; v. establish the relationship between transport and communication; vi. relate the modes of transportation and communication to their relative advantages and disadvantages; vii. classify the major commodities of regional and international trade; viii. identify reasons for tourism and tourist centres; ix. account for the problems and solutions Ci. State the meaning, purpose and objectives; ii. identify and locate the member countries; iii. evaluate the prospects and problems of the organization.

RECOMMENDED TEXTS

Adeleke, B.O. Areola .O. 2002 and Leong, G.C. *Certificate Physical and Human Geography* for Senior Secondary School (West African Edition), Ibadan: Oxford.

Bradshaw, M. et al (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. et al (2005) *Introduction to Geography (Seventh Edition)* New York: McGraw Hill

Getis, A. et al (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

Nimako, 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.

Adegoke M.A (2013), *A Comprehensive Text on Physical, Human and Regional Geography*.