

GEOGRAPHY Examination Syllabus *

FORM 1

1. INTRODUCTION TO GEOGRAPHY

1. Definition 1. Geography 2. environment

2. branches of geography

1. physical Geography
2. Human Geography

3. importance study of geography

4. relationship between geography and other disciplines

2. THE EARTH AND THE SOLAR SYSTEM 1. composition of the solar system

2. ori, shape,size,and position of the earth in the solar system 3. rotation and revolution of the earth and their effects

4. structure of the earth

1. the atmosphere
2. the hydrosphere
3. the lithosphere/crust
4. the asthenosphere /mantle
5. the core (outer and inner core)

WEATHER

1. definition of weather
2. elements of weather
3. factors for siting weather station
4. instrument for measuring elements of weather condition
5. recording and calculating weather conditions
6. structure and composition of the atmosphere
7. weather forecasting
8. factors influencing weather

4. STATISTICAL METHODS

1. definition of statistics
2. types of statistical data
3. source of statistical data
4. method of collecting data
5. methods of recording data
6. analysis of data by working out
 1. arithmetic mean
 2. median
 3. mode
 4. percentage
 5. range

7. statistical representation through;

1. simple lines
2. simple bars
3. combination bar and line graph
4. simple wind rose

8. advantage and disadvantage of each method of data presentation

5. MAPS AND MAP WORK

1. definition of pictures, plans and maps
2. distinction between pictures, plans and maps
3. types of maps
 1. atlas maps
 2. topographical maps
 3. sketch maps
4. uses o maps
5. maral information
6. map scales
 1. estimations and measurements
 2. calculation of area of regular and irregular shopes

6. FIELD WORK

1. Definition of field work
2. types of field work
3. importance of field work
4. field work procedure
5. problems likely to be encountered during field study
6. field work within the local environment

7. MINERALS AND ROCKS

1. Definition of minerals 1. rocks 2. characteristics of minerals 3. classification of rock according to mode of formation 4. characteristics of rocks 5. distribution of major types of rocks in Kenya 6. significance of rocks in Kenya

8. MINING

1. Definition of mining
2. factors influencing the occurrence of minerals and their exploitation
3. methods of mining
4. distribution of major minerals in kenya
5. significance of minerals in kenya
6. problems fancing the mining industry in kenya
7. effects of mining on the enviroment
8. study of trona on lake magadi
9. gold amd diamond in south Africa
10. petroleum in middle east

* FORM 2

1. INTERNAL LAND FORMING PROCESSES

1. Earth movement 1. definition 2. types of movements horizontal and vertical 3. Causes

2. Theories of

1. Continental Drift
2. Plate tectonics

3. Folding

1. definition
2. Processes
3. types of folds and the resultant features
4. World distribution of folds mountain systems
5. Significance to human activities

4. Faulting

1. Definition
2. Processes
3. Types of faults and the resultant features
4. A study of the great rift valley
5. World distribution of features due to faulting
6. Significance of faulting to human activities

5. Vulcanicity

1. definition
2. types and the resultant features
3. World distribution of features due to vulcanicity
4. Significance of vulcanicity to human activities

6. Earthquakes

1. Definition
2. causes
3. measurements
4. Distribution of major earthquake zones in the world
5. effects of earthquake

2. MAP WORK

1. Direction and bearing 1. distinction between direction and bearing 2. Traditional and modern methods of showing direction 3. Calculation of bearing

2. Location of places using

1. Direction, bearing, and distance
2. Places names
3. Latitude and longitudes

4. Grid reference system

3. Methods of representing relief on topographical maps

3. PHOTOGRAPH WORK

1. types of photographs
2. Parts of a photograph
3. interpretation of a photograph by
4. Estimating actual size of photographs
5. Sketching from photographs
6. Studying physical features and human activities in

photographs

4. STATISTICAL METHODS

1. Statistical presentation, analysis and interpretation of: 1. comparative group multiple line graphs 2. Comparative group multiple bar graphs 3. Divided bars rectangles

2. advantage and disadvantage of each method of data presentation

5. CLIMATE

1. Distinction between weather and climate
2. Factors influencing climate
3. Distribution and characteristics of climatic regions of
 1. Kenya
 2. The world

4. Causes effects and possible solution to

1. Aridity
2. Desertification

5. Causes and consequences of climate change

6. VEGETATION

1. DEFINITION OF VEGETATION

2. Factors influencing the distribution of vegetation 3. Characteristics of major vegetation region of - Kenya - The world 4. Significance of vegetation 5. Field work

7. FORESTRY 1. definition 1. Forestry 2. Forest

2. Factors influencing the distribution and types of natural forest 3. importance of forests and forest products to Kenya 4. Problems facing forestry in Kenya 5. Management and conservation of forests with specific emphasis to Kenya 6. Related study on softwood in Kenya and Canada

*** FORM 3**

1. STATISTICAL METHODS 1. statistical presentation, analysis and interpretation of

1. Compound/cumulative bar graphs
2. proportional circles
3. Pie charts/dividing circles

2. advantages and disadvantages

2. MAP WORK

1. INTERPRETATION of physical features and human activities on topographical maps

1. Land forms
2. vegetation
3. Drainage
4. economic activities
5. Settlements

2. Enlargement and reduction of maps 3. Drawing of cross sections 4. calculations and interpretation of

1. vertical exaggeration
2. gradient

5. Intervisibility

3. EXTERNAL LAND FORMING PROCESSES

1. Weathering 1. definition 2. Agents 3. Types and processes 4. Significance of weathering

2. Mass wasting

1. Definition
2. Factors influencing mass wasting
3. Types and processes
4. Effects of mass wasting on the physical and human environments
5. Hydrological cycle
6. Definition
7. Process
8. Significance

4. Action of rivers

1. Definition
2. the work of rivers and the development of rivers
3. The resultant features
4. River capture and rejuvenation
5. Drainage patterns
6. The significance of rivers and the resultant

features

5. Lakes

1. Definition of lake
2. Formation and classification of lakes
3. Significance of lakes

6. Oceans Seas and their coasts

1. distinction between oceans and seas
2. Nature of ocean water
3. water movement meaning causes and significance of
4. Wave action and the resultant features
5. types of coast
6. significance of oceans ,coast and coastal features

7. Action of wind and water in arid areas

1. Process and the resultant features
2. Significance of the resultant features

8. Action of water in limestone areas 1. Process of surface and underground water and the resultant features 9. Glaciation

1. Definition of
2. Process of glaciation and the resultant features in

highlands and low lands areas 3. Significance of glaciation

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Field work

4. SOILS

1. Definition of soil
2. Composition of soil
3. Soil forming processes
4. Properties and characteristics of soils

5. Soil profile and soil catena

6. Soil degeneration

1. definition
2. Types of soil degeneration
3. Soil erosion

7. Classification of soils

8. Significance of soils

9. Management and conservation of soil

5. AGRICULTURE

1. Definition of agriculture

2. Factors influencing agriculture
3. Types of agriculture

4. Crop farming

1. major cash crops in kenya
2. study of Tea Sugar cane, and maize
3. Study of cocoa in Ghana
4. Oil palm in Nigeria
5. Related study in coffee in kenya and brazil, wheat in

kenya and canada ,horticulture in kenya and the netherlands

5. Livestock Farming

1. Pastoral farming in kenya
2. Dairy farming in kenya and Denmark
3. Beef farming in kenya and Argentina

6. Field work

* FORM 4

1. STATISTICAL METHODS

1. Statistical representation through age-sex pyramids

2. Analysis and interpretation of

1. Age-sex pyramids
2. Dot maps
3. Choropleth maps

2. LAND RECLAMATION 1. A study of 1. mwea-Tebera irrigation scheme 2. Pekera irrigation schemes

2. Definition of

1. land reclamation
2. land rehabilitation
3. Significance of irrigation farming in kenya
4. Problems experienced in irrigation farming in kenya
5. Methods of land reclamation and rehabilitation kenya
6. Related studies on land reclamation in kenya and the Netherlands

3. FISHING

1. Definition of; 1. Fishing 2. Fisheries 2. Factors influencing fishing 3. Distribution of major fishing grounds of the world 4. types and methods of fishing 5. Fresh water and marine fisheries in East Africa 6. Problems facing in Kenya and their solutions 7. Comparative study of fishing in Kenya and Japan 8. Management and conservation of fresh water and marine fisheries

4. WILDLIFE AND TOURISM

1. Wildlife 1. Definition of wildlife 2. factors influencing the distribution of wildlife in East Africa 3. Distinction between game reserve ,national park and sanctuaries 4. location of national parks major reserves and sanctuaries in East Africa 5. Significance of wildlife 6. Problems facing wildlife in East Africa 7. Management and conservation of wildlife in East Africa

2. TOURISM

1. Definition of ;
2. Distinction between domestic and international tourism
3. factors influencing tourism in kenya
4. Tourism attraction in kenya

5. Significance of tourism
6. Problems facing and associated with tourism in Kenya
7. Related study on tourism in Switzerland
8. The future of tourism in Kenya

5. ENERGY

1. Definition of energy
2. Sources and types of energy
3. Electric power projects in Kenya and Uganda
 1. Hydro-electric power projects
 2. Geothermal power projects in Kenya
4. Location and other hydro-electric power projects in Africa
5. Significance of energy
6. The energy crisis
7. Management and conservation of energy

6. INDUSTRY

1. definition
 1. Industry
 2. Industrialization
2. factors influencing the location and development of industries
3. Types of industries
4. Distribution of industries in kenya
5. Significance of industrialization in kenya
6. Problems of industrialization and their possible solutions
7. A study on
 1. Cottage industry in india
 2. Iron and steel industry in the Ruhr region of Germany
 3. Car manufacture and electronics industry in Japan

7. TRANSPORT AND COMMUNICATION

1. Definition
 1. Transport
 2. Communication
2. Mode of transport and types of communication
3. The role of transport and communication in the economic development of Africa
4. Problems facing transport and communication in Africa and efforts being made to solve them
5. A study of the Great lakes and the St Lawrence seaway

8. TRADE

1. Types of trade
2. factors influencing trade
3. Major exports and imports of kenya
4. Significance of trade to kenya
5. problems facing trade in kenya
6. The future of international trade in kenya
7. The role played by the following regional trading blocks

in the economic of their respective regions

1. COMESA
2. SADAC
3. ECOWAS
4. EU

9. POPULATION

1. Definition of population
2. Factors influencing population
3. Factors influencing population growth in ;
 1. fertility

2. Mortality 3. Migration

4. Population structure 5. Consequences of population growth and structure 6. Related studies on population in Kenya and Sweden

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SETTLEMENT

1. Definition 1. settlement 2. Urbanization

2. Factors influencing

1. Settlements
2. patterns of settlement

3. Distribution of major urban centers in East Africa

4. Factors influencing the growth of major urban center in East Africa

5. Study of the following towns in Kenya

1. Thika
2. Kisumu
3. Eldoret

6. Related studies with the following

1. Cities Nairobi and New York
2. Port Mombasa and Rotterdam

7. Effects of urbanization

11. MANAGEMENT AND CONSERVATION OF THE ENVIRONMENT

1. definition of; 1. Management 2. conservation

2. the need for environmental management and conservation

3. Environmental hazards

4. Selected environmental hazards the associated problems and measures for combating them

1. Floods
2. Lightning
3. Wind storm
4. Pest and diseases
5. Pollution

5. Environmental management and conservation measures in Kenya 6. field work