# 312 – GEOGRAPHY

### **GENERAL OBJECTIVES**

By the end of the course, the learner should be able to:

- 1. appreciate the importance of studying Geography;
- 2. recognize different types of environments and manage them for individual, national and international development;
- 3. identify and explain weather phenomena and their influence on the physical environment and human activities;
- 4. explain land-forming processes and appreciate the resultant features and their influence on human activities;
- 5. acquire knowledge of available natural resources and demonstrate ability and willingness to utilize them sustainably;
- 6. identify and compare economic activities in Kenya and the rest of the world;
- 7. state, interpret, analyse and use Geographical principles and methods to solve problems of national development;
- 8. apply field-work techniques in studying Geography;
- 9. acquire knowledge and skills necessary to analyse population issues of Kenya and the world;
- 10. appreciate the importance of interdependence among people and among nations;
- 11. identify, assess and have respect for different ways of life influencing development at local, national and international levels;
- 12. demonstrate the acquisition of positive attitudes, values and skills for self reliance;
- 13. acquire appropriate knowledge, skills and attitudes as a basis for technological and industrial development;
- 14. promote patriotism and national unity.

# 1.0.0 INTRODUCTION

### 1.1.0 Specific objectives

By the end of the topic, the learner should be able to:

- (a) define the terms Geography and Environment;
- (b) describe the branches of Geography;
- (c) explain the importance of studying Geography;
- (d) explain the relationship between geography and other disciplines.

### **1.2.0** Content

- 1.2.1 Definition of: (a) Geography and (b) Environment.
- 1.2.2 Branches of Geography: (a) Physical geography and (b) Human Geography.
- 1.2.3 Importance of studying Geography.
- 1.2.4 Relationship between geography and other disciplines.

# 2.0.0 THE EARTH AND THE SOLAR SYSTEM

# 2.1.0 Specific objectives

By the end of the topic, the learner should be able to:

(a) define the solar system;

- (b) explain the origin of the earth;
- (c) explain the effects of rotation and revolution of the earth;
- (d) describe the structure of the earth.

- 2.2.1 Definition and composition of the solar system.
- 2.2.2 Origin, shape, size, and position of the earth in the solar system
- 2.2.3 Rotation and revolution of the earth and their effects.
- 2.2.4 Structure of the earth (a) the atmosphere, (b) the hydrosphere, (c) the lithosphere/crust, (d) the asthenosphere/mantle and (e) the barysphere/centrosphere (outer and inner core).

### 3.0.0 STATISTICAL METHODS

# 3.1.0 Specific objectives

By the end of the topic, the learner should be able to:

- (a) define the term statistics;
- (b) identify types and sources of statistical data;
- (c) identify and describe methods of collecting and recording data;
- (d) analyse, interpret and present statistical data using appropriate graphical methods;
- (e) explain the advantages and disadvantages of each method of data presentation.

### **3.2.0** Content

- 3.2.1 Definition of statistics.
- 3.2.2 Types of statistical data.
- 3.2.3 Sources of statistical data
- 3.2.4 Methods of collecting data.
- 3.2.5 Methods of recording data.
- 3.2.6 Analysis of data by working out arithmetic mean, median, mode, percentage, range.
- 3.2.7 Statistical analyses, interpretation and presentation by use of Line graphs, Bar graphs, Polygraph (combined line and bar graphs), Wind rose, Comparative/group line and bar graphs, cumulative bar graphs, proportional circles, pie charts, divided bars/rectangles, population pyramids and Age-Sex pyramids.
- 3.2.8 Analysis and interpretation of dot and choropleth maps.
- 3.2.9 Discussion of the advantages and disadvantages of each method of data presentation.

#### 4.0.0 FIELD WORK

### 4.1.0 Specific objectives

By the end of the topic, the learner should be able to:

- (a) define the term field work;
- (b) state different types of field work;
- (c) explain the importance of field work;
- (d) explain the procedure to be followed during field work;
- (e) identify possible problems during field work;
- (f) carry out field work within the local environment.

### **4.2.0 Content**

4.2.1 Definition of field work.

- 4.2.2 Types of field work.
- 4.2.3 Importance of field work.
- 4.2.4 Field work procedure.
- 4.2.5 Problems likely to be encountered during fieldwork.
- 4.2.6 Field work within the local environment.

#### 5.0.0 MINERALS AND ROCKS

# 5.1.0 Specific objectives

By the end of the topic, the learner should be able to:

- (a) define minerals and rocks;
- (b) state the characteristics of minerals;
- (c) classify rocks according to mode of formation;
- (d) state the characteristics of rocks;
- (e) account for the distribution of major types of rocks in Kenya;
- (f) explain the significance of rocks;
- (g) identify major types of rocks and their use within the local environment.

### 5.2.0 Content

- 5.2.1 Definition of (a) minerals and (b) rocks.
- 5.2.2 Characteristics of minerals.
- 5.2.3 Classification of rocks according to mode of formation.
- 5.2.4 Characteristics of rocks.
- 5.2.5 Distribution of major types of rocks in Kenya.
- 5.2.6 Significance of rocks
- 5.2.7 Field work Identification of major types of rocks and their uses within the local environment.

### 6.0.0 INTERNAL LAND FORMING PROCESSES

## **6.1.0 Specific objectives**

By the end of the topic, the learner should be able to:

- (a) define earth movements;
- (b) explain the causes of horizontal and vertical earth movements:
- (c) explain the theories of Continental Drift and Plate Tectonics;
- (d) define folding, faulting, vulcanicity and earthquakes;
- (e) explain the processes of folding, faulting, and vulcanicity;
- (f) describe types of folds, faults and forms of vulcanicity;
- (g) explain features that result from folding, faulting and vulcanicity;
- (h) explain the causes of earthquakes;
- (i) describe how earthquakes are measured;
- (j) account for the world distribution of earthquake zones, fold mountain systems and features due to faulting and vulcanicity;
- (k) explain the significance of the resultant features of folding, faulting, vulcanicity and effects of earthquakes.

## 6.2.0 Content

### **6.2.1 Earth Movements**

(a) Definition

- (b) Types of earth movements horizontal and vertical movements.
- (c) Causes of earth movements

# 6.2.2 Theories of the origins of

- (a) Continental drift and
- (b) Plate tectonics

### 6.2.3 Folding

- (a) Definition, and processes of folding.
- (b) Types of folds
- (c) Features resulting from folding.
- (d) World distribution of fold mountain systems.
- (e) Significance of folding to human activities.

### 6.2.4 Faulting

- (a) Definition, and processes of faulting.
- (b) Types of faults.
- (c) Features resulting from faulting.
- (d) A study of the Great Rift Valley.
- (e) World distribution of features formed through faulting.
- (f) Significance of faulting to human activities.

# **6.2.5 Vulcanicity**

- (a) Definition of vulcanicity.
- (b) Types of vucanicity and the resultant features.
- (c) World distribution of features formed through vulcanicity.
- (d) Significance of vulcanicity to human activities.

## 6.2.6 Earthquakes

- (a) Definition of earthquakes.
- (b) Measurement of earthquakes.
- (c) Distribution of the major earthquake zones of the world.
- (d) Effects of earthquakes.

### 7.0.0 EXTERNAL LAND-FORMING PROCESSES

### 7.1.0 Specific objectives

By the end of the topic, the learner should be able to:

- (a) define weathering, mass wasting, hydrological cycle, river systems, lakes and glaciation.
- (b) distinguish between oceans and seas;
- (c) describe water movement in oceans and seas;
- (d) explain the factors that contribute to the sculpturing of the earth;
- (e) explain external land-forming processes and the resultant features;
- (f) identify the sources of underground water;
- (g) discuss the significance of the resultant physical features to the environment;
- (h) carry out field-work of the landforms within the local environment.

# 7.2.1 Weathering

- (a) Definition of weathering.
- (b) Agents of weathering.
- (c) Types and processes of weathering.
- (d) Significance of weathering to physical and human environments.

# 7.2.2 Mass Wasting

- (a) Definition of mass wasting.
- (b) Factors influencing mass wasting.
- (c) Types and processes of mass wasting.
- (d) Effects of mass wasting on the physical and human environments.

# 7.2.3 Hydrological cycle

- (a) Definition of hydrological cycle.
- (b) Process of the cycle.
- (c) Significance of the cycle

### 7.2.4 Action of rivers

- (a) Definition of rivers
- (b) River erosion, transportation and deposition and the resultant features.
- (c) Development of cross and long river profiles.
- (d) River capture and rejuvenation.
- (e) Drainage patterns.
- (f) Significance of (i) rivers and (ii) river formed features.

# **7.2.5** Lakes

- (a) Definition of the term lake.
- (b) Formation and classification of lakes.
- (c) Significance of lakes.

# 7.2.6 Oceans, seas and types of coasts

- (a) Distinction between oceans and seas.
- (b) Nature of ocean water.
- (c) Water movement: meaning, causes and significance of (i) vertical movements and (ii) horizontal movements ocean currents, tides and waves.
- (d) Wave erosion, transportation and deposition, and resultant features.
- (e) Types of Coasts.
- (f) Significance of oceans, seas, coasts and coastal features.

### 7.2.7 Action of wind and water in arid areas.

- (a) Processes of wind erosion and transportation in arid areas.
- (b) Features formed by wind erosion and deposition.
- (c) Features formed by water in arid areas.
- (d) Significance of features found in arid areas.

## 7.2.8 Action of water in limestone areas

- (a) Sources of underground water.
- (b) Formation of features by surface and underground water in limestone areas.

(c) Significance of the features.

### 7.2.9 Glaciation

- (a) Definition of the term glaciation, glaciers, ice sheets, ice caps and icebergs.
- (b) Processes of glacial erosion, transportation and deposition in highland and lowland areas and the resultant features.
- (c) Significance of glaciation.

### 7.3.0 Field work

Study of significant land-forming processes within the local environment.

### 8.0.0 WEATHER AND CLIMATE

# 8.1.0 Specific objectives

By the end of the topic, the learner should be able to:

- (a) distinguish between weather and climate;
- (b) state the elements of weather;
- (c) explain the conditions necessary for the sitting of a weather station,
- (d) use instruments to measure elements of weather;
- (e) analyse and interpret data on weather conditions,
- (f) describe the structure and composition of the atmosphere;
- (g) explain the factors that influence weather and climate;
- (h) describe the characteristics of climatic regions of Kenya;
- (i) describe the characteristics of major climatic regions of the world;
- (j) account for the causes of aridity and desertification;
- (k) explain the effects and possible solutions to aridity and desertification, discuss the causes and impact of climate change on the physical and human environment;
- (1) carry out field study on a weather station.

### **8.2.0** Content

- 8.2.1 Distinction between weather and climate.
- 8.2.2 Elements of weather.
- 8.2.3 Factors to consider in siting a weather station.
- 8.2.4 Instruments for measuring weather elements.
- 8.2.5 Recording and calculating weather data.
- 8.2.6 Structure and composition of the atmosphere.
- 8.2.7 Weather forecasting.
- 8.2.8 Factors influencing weather.
- 8.2.9 Factors that influence climate.
- 8.3.0 Distribution and characteristics of climatic regions of Kenya and the world.
- 8.3.1 Causes, effects and possible solutions to aridity and desertification.
- 8.3.2 Causes and impact of climate change on physical and human environment.
- 8.2.9 Field work a study based on a weather station.

### **9.00 SOILS**

# 9.10 Specific objectives

By the end of the topic, the learner should be able to:

(a) define soil, soil profile, soil catena, soil degeneration/degradation and soil erosion;

- (b) discuss the composition of soil and the processes of soil formation;
- (c) describe the properties and characteristics of soil;
- (d) describe soil profile and soil catena;
- (e) explain soil degeneration/degradation;
- (f) classify soils according to soil orders;
- (g) discuss the significance of soils;
- (h) discuss ways and means of managing and conserving soil;
- (i) identify different types of soils and their uses within the local environment

- 9.2.1 Definition of soil.
- 9.2.2 Composition of soil.
- 9.2.3 Soil forming processes.
- 9.2.4 Properties and characteristics of soil.
- 9.2.5 Soil profile and catena.
- 9.2.6 Soil degeneration/degradation, including soil erosion.
- 9.2.7 Classification of soils: zonal, intrazonal and azonal.
- 9.2.8 Significance of soils.
- 9.2.9 Management and conservation of the soil.
- 9.3.0 Field work identification of different types of soils and explanation of uses within the local environment.

### 10.0.0 VEGETATION

# **10.1.0 Specific Objectives**

By the end of the topic, the learner should be able to:

- (a) define vegetation;
- (b) discuss the factors that influence the distribution of vegetation;
- (c) identify and describe the characteristics of major vegetation regions of Kenya and the world;
- (d) discuss the significance of vegetation;
- (e) identify different types of vegetation and explain their uses within the local environment.

#### **10.2.0 Content**

- 10.2.1 Definition of vegetation.
- 10.2.2 Factors that influence the distribution of vegetation.
- 10.2.3 Characteristics of major vegetation regions of Kenya and the World.
- 10.2.4 Significance of vegetation.
- 10.2.5 Fieldwork on identification of different types of vegetation and explanation of their uses within the local environment.

### 11.0.0 MAPS AND MAP WORK

# 11.1.0 Specific objectives

By the end of the topic, the learner should be able to:

- (a) define pictures, plans and maps;
- (b) explain the relationships between pictures plans, and maps;
- (c) identify types of maps and state their uses;
- (d) identify and use marginal information on maps;
- (e) identify types and uses of scales;

- (f) determine distances and areas using scales;
- (g) distinguish between direction and bearing;
- (h) identify traditional and modern methods of locating places and features;
- (i) locate places and features on maps using various methods,
- (j) describe the different methods of representing relief on topographical maps;
- (k) identify and describe physical features and human activities on topographical maps;
- (1) enlarge and reduce parts of topographical maps;
- (1) draw cross-sections from topographical maps;
- (m) calculate and interpret vertical exaggeration and gradient
- (n) determine points of intervisibility.

- 11.2.1 Definition of pictures, plans and maps.
- 11.2.2 Relationship between pictures, plans and maps.
- 11.2.3 Types of maps e.g. Atlas maps, topographical maps, and sketch maps.
- 11.2.4 Uses of maps.
- 11.2.5 Marginal information.
- 11.2.6 Map scales:- types of scales, conversion of scales, sizes of scales.
- 11.2.7 Uses of scales:- estimation and measurement of distance and calculation of areas of regular and irregular shapes.
- 11.2.8 Distinction between direction and bearing.
- 11.2.9 Traditional and modern methods of showing direction.
- 11.3.0 Calculation of bearing
- 11.3.1 Location of places and features using compass direction, bearing, distance, place names, latitudes and longitudes, grid reference.
- 11.3.2 Methods of representing relief on topographical maps.
- 11.3.3 Identification and description of the following in topographical maps:-landforms, vegetation, drainage, economic activities and settlement.
- 11.3.4 Enlargement and reduction of maps.
- 11.3.5 Drawing of cross-sections.
- 11.3.6 Calculation and interpretation of (a) vertical exaggeration and (b) gradient.
- 11.3.7 Determining intervisibility.

### 12.0.0 PHOTOGRAPH WORK

## 12.1.0 Specific objectives.

By the end of the topic, the learner should be able to:

- (a) identify types of photographs;
- (b) describe parts of a photograph;
- (c) estimate sizes of features appearing on photographs;
- (d) draw sketches from photographs;
- (e) identify and interpret features from photographs.

- 12.2.1 Types of photographs.
- 12.2.2 Parts of a photograph.
- 12.2.3 Interpretation of photographs by estimation of actual sizes of features, sketching from photographs, studying and describing natural and human features and activities on photographs.

### **13.0.0 FORESTRY**

# 13.1.0 Specific objectives

- By the end of the topic, the learner should be able to:
- (a) define forest and forestry;
- (b) discuss the factors that influence the distribution and types of natural forests;
- (c) discuss the significance of forests and forest products to Kenya;
- (d) identify and explain the problems facing forestry in Kenya;
- (e) discuss ways and means of managing and conserving forests in Kenya;
- (f) compare and contrast softwood forests in Kenya and Canada;
- (g) demonstrate the ability to manage and conserve forests and forest resources.

### **13.2.0 Content**

- 13.2.1 Definition of forest and forestry.
- 13.2.2 Factors influencing the distribution and types of natural forests.
- 13.2.3 Importance of forests and forest products to Kenya.
- 13.2.4 Problems facing forestry in Kenya.
- 13.2.5 Management and conservation of forests with specific emphasis on Kenya.
- 13.2.6 Related study on softwood in Kenya and Canada.

### **14.0.0 MINING**

# 14.1.0 Specific objectives

- By the end of the topic, the learner should be able to:
- (a) define the term mining;
- (b) explain the factors that influence the occurrence of minerals and mining activities;
- (c) describe methods of mining;
- (d) state the location of the major minerals of East Africa and show them on a map;
- (e) explain the significance of locally available minerals in Kenya;
- (f) state and account for the problems facing the mining industry in Kenya;
- (g) explain the effects of mining on the environment;
- (h) describe the occurrence of specific minerals and their exploitation in selected countries.

- 14.2.1 Definition of mining
- 14.2.2 Factors influencing the occurrence of minerals and their exploitation
- 14.2.3 Methods of mining.
- 14.2.4 Distribution of major minerals in East Africa
- 14.2.5 Significance of minerals in Kenya.
- 14.2.6 Problems facing the mining industry in Kenya.
- 14.2.7 Effects of mining on the environment.
- 14.2.8 Study of (a) Trona on Lake Magadi in Kenya (b) Gold and diamonds in South Africa and (c) Petroleum in the Middle East.

### 15.0.0 AGRICULTURE

# 15.1.0 Specific objectives

- By the end of the topic, the learner should be able to:
- (a) define agriculture;
- (b) discuss the factors that influence agriculture;
- (c) explain types of agriculture;
- (d) locate the major cash crop growing areas in a map of Kenya;
- (e) discuss the growing of selected cash crops in different countries;
- (f) compare and contrast farming practices for selected cash-crops in Kenya and other countries;
- (g) discuss pastoral farming in Kenya;
- (h) compare and contrast (i) dairy farming in Kenya and Denmark (ii) beef farming in Kenya and Argentina;
- (i) carry out fieldwork on agricultural activities in the local environment.

# **15.2.0 Content**

- 15.2.1 Definition of agriculture.
- 15.2.2 Factors that influence agriculture.
- 15.2.3 Types of agriculture.
- 15.2.4 Crop farming (a) distribution of major cash crops in Kenya, (b) a study of tea, sugar-cane and maize in Kenya, (c) a study of cocoa in Ghana and oil palm in Nigeria and (d) comparative studies of coffee in Kenya and Brazil, wheat in Kenya and Canada and horticulture in Kenya and the Netherlands.
- 15.2.5 Livestock farming (a) pastoral farming in Kenya (b) comparative study of dairy farming in Kenya and Denmark and beef farming in Kenya and Argentina.
- 15.2.6 Field work collect, record, analyse, and present data on agricultural activities in the local environment.

### 16.0.0 LAND RECLAMATION AND REHABILITATION

# 16.1.0 Specific objectives

- By the end of the topic, the learner should be able to;
- (a) define land reclamation and rehabilitation;
- (b) discuss the factors that influenced the location of selected irrigation schemes in Kenya, the significance of the schemes and the problems that are experienced in carrying out irrigation farming in Kenya;
- (c) describe the methods that are used in land reclamation and rehabilitation in Kenya;
- (d) compare the methods of land reclamation in Kenya and the Netherlands,

- 16.2.1 Meaning of the terms land reclamation and rehabilitation.
- 16.2.2 A study of Mwea-Tebere and Perkerra irrigation schemes.
- 16.2.3 Importance of irrigation farming in Kenya.
- 16.2.4 Problems experienced in irrigation farming in Kenya.
- 16.2.5 Methods of land reclamation and rehabilitation in Kenya.
- 16.2.6 Comparative study of land reclamation in Kenya and the Netherlands.

### **17.0.0 FISHING**

# 17.1.0 Specific objectives

- By the end of the topic, the learner should be able to:
- (a) define the terms fishing and fisheries;
- (b) explain the factors that influence fishing;
- (c) account for the location of the major fishing grounds of the world;
- (d) identify types and names of fish and describe methods of fishing;
- (e) discuss fresh water and marine fisheries in East Africa;
- (f) assess the significance of the fishing industry in Kenya;
- (g) discuss the problems that face the fishing industry in Kenya and their possible solutions;
- (h) compare and contrast fishing activities in Kenya and Japan;
- (i) explain ways and means of managing and conserving fresh water and marine fisheries.

# 17.2.0 Content

- 17.2.1 Definition of fishing and fisheries
- 17.2.2 Factors that influence fishing.
- 17.2.3 distribution of the major fishing grounds of the world.
- 17.2.4 Types and names of fish.
- 17.2.5 Methods of fishing.
- 17.2.6 Fresh water and marine fisheries in East Africa.
- 17.2.7 Significance of the fishing industry in Kenya,
- 17.2.8 Problems facing fishing in Kenya and their possible solutions.
- 17.2.9 Comparative study of fishing in Kenya and Japan.
- 17.3.0 Management and conservation of fresh water and marine fisheries.

### 18.0.0 WILDLIFE AND TOURISM

### **18.1.0** Specific objectives

- By the end of the topic, the learner should be able to:
- (a) define the terms wildlife, tourism and eco-tourism;
- (b) distinguish between (i) game reserves, national parks and sanctuaries (ii) domestic tourism and international tourism;
- (c) explain the factors that influence the distribution of wildlife in East Africa and tourism in Kenya;
- (d) locate national parks, major game reserves and sanctuaries on a map of East Africa;
- (e) identify and discuss tourism attractions in Kenya;
- (f) discuss the significance of wildlife and tourism in Kenya;
- (g) discuss (i) the problems facing wildlife is East Africa and (ii) those facing and associated with tourism in Kenya;
- (h) discuss the management and conservation of wildlife in East Africa;
- (i) discuss the future of tourism in Kenya;
- (j) compare and contrast tourism in Kenya and Switzerland.

- 18.2.1 Definition of the term wildlife,
- 18.2.2 Factors influencing the distribution of wildlife in East Africa.
- 18.2.3 Distinction between game reserves, national parks and sanctuaries and their

- distribution in East Africa.
- 18.2.4 Location of National Parks, major game reserves and sanctuaries in East Africa.
- 18.2.5 Significance of wildlife in East Africa.
- 18.2.6 Problems facing wildlife in East Africa.
- 18.2.7 Management and conservation of wildlife in East Africa.
- 18.2.8 Definition of the terms tourism and eco-tourism,
- 18.2.9 Distinction between domestic and international tourism.
- 18.2.10 Factors influencing tourism in Kenya.
- 18.2.11 Significance of tourism.
- 18.2.12 Problems facing and associated with tourism in Kenya.
- 18.2.13 Comparative study of tourism in Kenya and Switzerland.
- 18.2.14 The future of tourism in Kenya.

### **19.0.0 ENERGY**

# 19.10 Specific objectives

By the end of the topic, the learner should be able to:

- (a) define energy;
- (b) discuss sources and types of energy;
- (c) discuss the development of electric power projects in Kenya and Uganda;
- (d) identify and locate other hydroelectric power projects in Africa;
- (e) explain the significance of energy;
- (f) explain the impact of the energy crisis in the world;
- (g) discuss ways and means of managing and conserving energy;
- (h) identify sources and uses of energy within the local environment.

### 19.2.0 Content

- 19.2.1 Definition of energy.
- 19.2.2 Sources and types of energy.
- 19.2.3 Hydroelectric power projects in Kenya and Uganda.
- 19.2.4 Geothermal power projects in Kenya.
- 19.2.5 Location of hydroelectric power projects elsewhere in Africa.
- 19.2.6 Management and conservation of energy.
- 19.2.7 Significance of energy
- 19.2.8 The energy crises.
- 19.2.9 Fieldwork on identification of sources and uses of energy within the local environment.

### **20.0.0 INDUSTRY**

# 20.1.0 Specific objectives

By the end of the topic, the leaner should be able to:

- (a) define industry and industrialization;
- (b) explain the factors that influence the location and development of industries;
- (c) describe types of industries;
- (d) account for the distribution of industries in Kenya;
- (e) explain the significance of industrialization to Kenya,
- (f) discuss the problems of industrialization and suggest possible solutions;
- (g) compare and contrast aspects of industrialization in selected countries;

(h) carry out fieldwork on an industry in the local area.

### **20.2.0 Content**

- 20.2.1 Definition of industry and industrialization.
- 20.2.2 Factors influencing the location and development of industries.
- 20.2.3 Types of industries.
- 20.2.4 Distribution of industries in Kenya.
- 20.2.5 Significance of industrialization to Kenya.
- 20.2.6 Problems of industrialization and their possible solutions
- 20.2.7 A study of (a) the cottage industry in India, (b) iron and steel industry in the Ruhr region in Germany and (c) car manufacture and electronic industry in Japan.
- 20.2.8 Field work on identification of industries within the local area and a detailed study of one of them.

### 21.0.0 TRANSPORT AND COMMUNICATION

# 21.1.0 Specific Objectives

By the end of the topic, the learner should be able to:

- (a) define transport and communication;
- (b) identify modes of transport and types of communication;
- (c) locate the major lines of transport in Africa;
- (d) outline the role of transport and communication in the economic development of Africa;
- (e) discuss the problems facing transport and communication in Africa and the efforts being made to solve them;
- (f) explain the role of the Great lakes and the St. Lawrence Seaway in the economies of the USA and Canada.

### **21.2.0** Content

- 21.2.1 Definition of, and distinction between transport and communications.
- 21.2.2 Modes of transport and types of communication.
- 21.2.3 Distribution of major lines of transport if Africa.
- 21.2.4 The role of transport and communication in the economic development of Africa.
- 21.2.5 Problems facing transport and communication in Africa and the efforts being made to solve them.
- 21.2.6 A study of the Great Lakes and the St. Lawrence Seaway.

#### 22.0.0 TRADE

### 22.1.0 Specific objectives

By the end of the topic, the learner should be able to:

- (a) define trade;
- (b) identify types of trade;
- (c) discuss the factors that influence trade;
- (d) identify the major exports and imports of Kenya;
- (e) assess the significance of trade to Kenya;
- (f) discuss the problems facing trade in Kenya;
- (g) assess the future of international trade in Kenya;
- (h) outline the role played by selected blocs in the economies of their respective countries.

- 22.2.1 Definition of trade.
- 22.2.2 Types of trade.
- 22.2.3 Factors that influence trade.
- 22.2.4 Major exports and imports of Kenya.
- 22.2.5 Significance of trade to Kenya.
- 22.2.6 Problems facing trade in Kenya.
- 22.2.7 The future of international trade in Kenya.
- 22.2.8 The role played by the (a) Common Market for Eastern and Southern Africa (COMESA), (b) Southern African Development Cooperation (SADC),(c) Economic Community of West African States (ECOWAS) and (d) European Union (EU) in the economies of their respective regions.

# 23.0.0 POPULATION

# 23.1.0 Specific objectives

- By the end of the topic, the learner should be able to:
- (a) define population;
- (b) explain the factors influencing the distribution of population is East Africa;
- (c) explain the factors influencing population growth;
- (d) describe population structure;
- (e) analyse the consequences of population growth and structure;
- (f) compare and contrast population trends between Kenya and Sweden;
- (g) present population data using relevant statistical graphs.

### **23.2.0** Content

- 23.2.1 Definition of population.
- 23.2.2 Factors influencing the distribution of population in East Africa.
- 23.2.3 Factors influencing population growth with specific reference to the fertility, mortality and migration.
- 23.2.4 Population structure.
- 23.2.5 Consequences of population growth and structure.
- 23.2.6 Comparative studies of the populations of Kenya and Sweden.

### 24.0.0 SETTLEMENT

### 24.10 Specific objectives

- By the end of the topic, the learner should be able to:
- (a) define settlement and urbanization;
- (b) explain the factors that influence settlements and settlement patterns;
- (c) account for the distribution of major urban centres in East Africa;
- (d) explain the growth and functions of selected towns in Kenya;
- (e) compare and contrast selected urban centres in Kenya with those of other part s of the world;
- (f) discuss the effects of urbanization.

- 24.2.1 Definition (a) settlement and (b) urbanization.
- 24.2.2 Factors that influence settlement and settlement patterns.
- 24.2.3 Distribution of major urban centres in East Africa.

- 24.2.4 Factors influencing the growth of major urban centres ins East Africa.
- 24.2.5 A study of (a) an industrial town in Kenya (Thika), (b) a lake port (Kisumu) and (c) an agricultural collection centre (Eldoret).
- 24.2.6 Comparative studies of (a) Nairobi and New York and (b) Mombasa and Rotterdam ports.
- 24.2.7 Effects of urbanisation.

# 25.0.0 MANAGEMENT AND CONSERVATION OF THE ENVIRONMENT

# 25.1.0 Specific objectives

- By the end of the topic, the learner should be able to:
- (a) define (i)management and (ii) conservation;
- (b) explain the importance managing and conserving the environment;
- (c) name environmental hazards;
- (d) assess the impact of selected environmental hazards and suggest measures of combating them;
- (e) discuss measures taken in managing and conserving the environment.

- 25.2.1 Definition of (a) management and (b) conservation.
- 25.2.2 The need for environmental management and conservation.
- 25.2.3 Environmental hazards.
- 25.2.4 Problems associated with, and measures of combating floods, lightning, windstorms, pests and diseases and environmental pollution.
- 25.2.5 Environmental management and conservation measures in Kenya.
- 25.2.6 Field work on any aspect of environmental pollution.