Buordon gauge	3
Plastic tubing Copper electrodes	2/22/
Leclanche cells (dry and wet)	2 (each)
Voltmeters	2
Ammeters	3
Tripod stands	3
Bunsen burners Beakers	2 3 3 2 5
Boiling flasks	5
Rubber bungs	4
Wire gauzes	4
Magnets (bar & horse shoe)	2 (each)
Coil (400 turns)	2 (pcs)
Galvanometers Leads (cable with clips)	2 20
Loads (cable with clips)	20
List of materials	Class of 20
Oils Cells	
Optical pins	1 packet
Candles	6 doz
Filters (red, blue and green)	3 of each
Zinc	
Hdrochloric acid	
Manganese IV oxide Potassium chlorate	
Sulphur	
Carbon (charcoal)	
Magnesium	
Calcium Iron rods	5
Copper rods	5 5
Steel rods	5
Chrome	5 5
Aluminium	5
Copper sulphate solution	
Sulphuric acid	

# 9.0 GENERAL STUDIES

# 9.01 INTORDUCTION

General studies is the study of factors within a given environment which affect an individual's life. Since the 8-4-4 system of Education aims at producing a balanced, self-reliant person, General studies therefore, seeks to develop in trainees, positive healthy attitudes, and communication skills to enable them to play their role effectively in the society.

# 9.02 GENERAL OBJECTIVES

At the end of this course unit, the trainee should be able to:-

- a) be aware of the various ways in which the individual and society interact;
- b) develop a positive attitude in relation to work and society;
- broaden and deepen his outlook to life;
- d) use relevant technology to meet human needs;
- e) appreciate and conserve his culture and environment;
- f) acquire values by which life may most satisfactorily be lived;
- g) develop communication skills to enable him/her to understand, interpret and express ideas, information and argument.

Potassium Permanganate

Iron filings

# SUBJECT CONTNENT FIRST YEAR (44 HOURS)

	SUB-TOPIC	HOURS
9.1.1S Communication Skills	Introduction     Written communication     Verbal communication     Factor influecing choice     of method	22
9.1.2.S Family Life	The family Privileges Impact of Modernization	3
9.1.3.S Population	Factors that lead to rapid increase in population     Effects of over population     Population control     Measure	3
9.1.4.S Pollution and other hazards	<ul> <li>Types of pollution and their effects</li> <li>Causes of pollution</li> <li>Control measures</li> <li>Hazards and their effects</li> <li>Causes</li> </ul>	6
9.1.5.S National Philosophy and Development	<ul> <li>Nation building</li> <li>National philosophies</li> <li>Youth and national development</li> <li>Integration of values</li> <li>Organisations that contribute towards Nation building</li> </ul>	6
9.1.6.S Leisure and Culture	<ul> <li>Music appreciation</li> <li>Culture, sports and games</li> <li>Dance</li> <li>Drama</li> <li>Leisure activities</li> </ul>	4

# FIRST YEAR SYLLABUS CONTENT

#### 9.1.1.S COMMUNICATION SKILLS (22 HOURS)

# 9.1.1.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) define the term communication;
- b) identify types of communication;
- c) apply given types of communication;
- d) state factors influencing choice of a communication method.

# 9.1.1.S11 Introduction to communication;

- i) definition.
- ii) types and channels of communication,
- iii) barriers to communication.

# 9.2.1.S12 Written communication;

- i) basic grammar,
- ii) composition,
- iii) comprehension and precis writing,
- iv) formal letter writing.

# 9.1.1.S13 Verbal communication:

- i) speech training e.g. debates. telephones, public speaking,
- ii) person to person communication e.g giving oral instruction.

# 9.1.1.S14 Factors influencing choice of method;

- i) time Factor,
- ii) cost,
- iii) secrecy,
- iv) reference.

# 9.1.2.S FAMILY LIFE (3 HOURS)

# 9.1.2.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) identify different types of families;
- b) state the role of individuals in families and society;
- c) state family problems related to modernization.

# 9.1.2.S11 The family;

- i) meaning,
- ii) types of families

- iii) marriages;
  - · types,
  - · reasons.

# 9.1.2.S12 Privileges;

- i) what they are,
- ii) whom they relate to,
- iii) use and abuse of privileges.

# 9.1.2.S13 Impact of Modernization on the Family;

- i) factors of modernization e.g. education, culture, religion and money:
- ii) influences of modernization on;
  - parental control of children,
  - family life and marriage s e.g. divorce, separation,
- iii) drug abuse.

# 9.1.3.S POPULATION (3 HOURS)

### 9.1.3.S1 Specific Objectives

At the end of this topic the trainee should be able to:-

- a) identify socio-economic and ethical effects of population change on the individual, environment and the nation;
- b) list problems and issues related to population growth;
- c) state population control measures.

# 9.1.3.S11 Factors that lead to rapid increase in population;

- i) lack of knowledge,
- ii) poverty,
- iii) lack of recreational facilities,
- iv) cultural beliefs & taboos.

# 9.1.2.S12 Effects of over-population;

- i) food crisis,
- ii) unemployment,
- iii) congestion i.e. housing & transport,
- iv) crime e.g. juvenile delinquency, prostitution,
- v) scarcity of social services e.g. education, health, recreation.

# 9.1.3.S13 Population Control Measures;

- i) education,
- ii) family planning,
- iii) provision of medical facilities.

# 9.1.4.S POLLUTION AND OTHER HAZARDS (6 HOURS)

# 9.1.4. S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) list types of environmental pollution and their effects;
- b) state the causes of environmental pollution;
- c) enumerate measures to control pollution;
- d) identify man's role in upsetting the balance of nature;
- e) identify causes of other natural hazards;
- f) enumerate measures of controlling other hazards.

## 9.1.4.S11 Types of pollution and their effects;

- i) water,
- ii) air,
- iii) soil,
- iv) noise.

### 9.1.4.S12 Causes of pollution;

- i) natural.
- ii) human,
- iii) industrial.

### 9.1.4.S13 Control measures:

- i) education,
- ii) legislation,
- iii) technology.

### 9.1.4.S14 Other hazards and their effects;

- i) desertification,
- ii) floods,
- iii) drought,
- iv) de-forestation,
- v) soil erosion.

# 9.1.4.S15 Causes;

- i) natural,
- ii) man-made.

# 9.1.4.S16 Control measures;

- i) re-afforestation,
- ii) planting cover crops,
- iii) strip cropping,
- iv) crop rotation,
- v) improvement of storage.

# 9.1.5.S NATIONAL PHILOSOPHY AND DEVELOPMENT (6 HOURS)

# 9.1.5.S1 Specific Objectives

At the end of this topic, the trainee should be able to:a) identify factors that promote nation building;

a) identify factors that promote has been within the Kenyan context b) explain the role of national philosophies within the Kenyan context

namely, Harambee and Nyayo; c) appreciate the integration of the traditional and modern values in

the process of Kenya's national development.

# 9.1.5.S11 Nation Building:

- i)Factors that promote Nation Building;
  - · patriotism,
  - · peace, love and unity.
- ii) Self Reliance;
  - · meaning,
  - · the role of the individual,
  - · the role of the society.
- iii) Dignity of work;
  - · reasons for work,
  - · work as it relates to self discipline, and other virtues.

# 9.1.5.S12 National philosophies;

- i) Harambee,
- ii) Nyayo,

# 9.1.5.S13 Youth and National Development:-

- i) The National Youth Service.
- ii) Young Men's Christian Association,
- iii) Young Women's Christian Association,
- iv) Kenya Boy Scouts,
- v) Kenya Girl Guide,

### 9.1.5.S14 Integration of Traditional and Modern values in Nation Building:-

- i) Communalism versus individualism,
- ii) Trade Unions,
- iii) Religious bodies,
- iv) Non-Governmental organizations and United Nations bodies.

# 9.1.5.S15 Organizations which contribute towards nation building:-

- i) Co-operatives,
- ii) Trade Unions,
- iii) Religious bodies,
- iv) Non-governmental organizations and United Nations bodies.

#### 9.1.6.S LEISURE AND CULTURE (4 HOURS)

### 9.1.6.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) appreciate the importance of culture, sports and games:
- b) identify the various cultural sporting and gaming activities:
- c) participate in cultural, sporting and gaming activities:
- d) select meaningful and participate in constructive leisure activities.

### 9.1.6.S11 Music appreciation:

- i) role of music in the society:
- ii) types:
  - · African.
  - · Eastern.
  - · Western.
- iii) singing:
  - traditional songs and choirs.

### 9.1.6.S12 Culture, sports and games:

- i) culture and games theory.
- ii) types of sports and games.

### 9.1.6.S13 Dance;

- i) the role of dance in society:
- ii) types of dances:
  - · African.
  - · Eastern.
  - Western.
- iii) dance training.

# 9.1.6.S14 Drama:

- i) role of drama in society;
- ii) types of drama:
  - · comedies.
  - tragedies.
  - satire.

# 9.1.6.S15 Leisure Activities:

- i) interaction, ii) health,

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- iii) creativity;
  - · music,
  - · photography,
  - sports,
  - · games,
  - gardening,
  - drama,
  - fishing.

# SECOND YEAR (44 HOURS)

TOPIC	SUB-TOPICS	HOURS
9.2.7.S Communication	<ul> <li>Interpretation of words</li> <li>Simple reports</li> <li>types and purpose of official forms</li> <li>Writing formal letters</li> <li>Human and Public Relations</li> </ul>	22
9.2.8.S Production	<ul> <li>Location of Business</li> <li>Types and techniques of production</li> <li>Costing and pricing</li> <li>Markets</li> <li>Contracts</li> </ul>	4
9.2.9.S Saving Borrowing and Investing	Methods of saving     Raising business capital     Financial institutions     Investing	. 3
9:2.10.S Buying and Selling	<ul> <li>Purpose of Buying and selling</li> <li>Methods of Buying and selling</li> <li>Determination of selling price</li> <li>Sales promotion</li> <li>Means of payment</li> </ul>	3
9.2.11.S Book-Keeping	Record Books     Elementary Budgeting	6
9.2.12.S Science and Technology	Importance of Science and Technology     Appropriate Technologies	4
9.2.13.S Government	The Three Arms of the Government     Local Government	2

# SECOND YEAR SYLLABUS CONTENT

# 9.2.7.S COMMUNICATION SKILLS (22 HOURS)

# 9.2.7.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) interpret information and manuals related to his particular trade
- b) write simple reports;
- c) fill official forms:
- d) organize and carry out simple administrative duties:
- e) appreciate the importance of human and public relations.

# 9.2.7.S11 Interpretation of technical words;

- i) vocabulary from relevant technical passages,
- ii) examination of technical manuals,
- iii) descriptive technical accounts of different tools, machinery and finished products.

### 9.2.7.S12 Simple Reports;

- i) format,
- ii) types of reports,
- iii) report writing.

### 9.2.7.S13 Types and purpose of official forms:

- i) filling different types of forms.
- ii) importance of clarity and neatness.

# 9.2.7.S14 Writing Formal letters:

- i) memos.
- ii) circulars.
- iii) disciplinary letters.
- iv) written instructions.

# 9.2.7.S15 Human and Public Relations;

- i) the meaning and importance.
- ii) the role of the employer.
- iii) the role of the employee.

# 9.2.8.S PRODUCTION (4 HOURS)

# 9.2.8.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) identify suitable locations for different types of business;
- b) identify various types of production;
- c) apply different techniques of costing and pricing;
- d) identify markets for different types of products;
- e) contract for a job and write a simple business agreement.
- 9.2.8.S11 Location of business
- 9.2.8.S12 Types and techniques of production
- 9.2.8.S13 Costing and pricing
- 9.2.8.S14 Types of markets
- 9.2.8.S15 Contracts:
  - i) simple business agreements,
  - ii) contracting for a job.

# 9.2.9.S SAVING, BORROWING AND INVESTING (3 HOURS)

# 9.2.9.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) list various methods of saving:
- b) state different ways of raising business capital;
- c) identify and make use of different types of financial institutions;
- d) state factors to consider when choosing a profitable investment.

### 9.2.9.S11 Methods of saving;

- i) savings deposit accounts,
- ii) fixed deposit accounts,
- iii) insurance policies,
- iv) premium bonds,
- v) Save As You Earn (S.A.Y.E),
- vi) co-operative, savings and Credit Accounts.

### 9.2.9.S12 Raising Business Capital;

i) Personal Savings,

- ii) Loans,
  - · short term,
  - · long term,
- iii) Joint funding;
  - · partnerships,
  - · companies,
  - · co-operatives.
- 9.2.9.S13 Financial Institutions
- 9.2.9.S14 Investing;
  - i) purpose of investing,
  - ii) chosing a profitable investment.
- 9.2.10.S BUYING AND SELLING (3 HOURS)
- 9.2.10.S1 Specific Objectives

At the end of this topic the trainee should be able to:-

- a) explain the purpose of buying and selling;
- b) identify different methods of buying and selling;
- c) work out the setting price of a given product;
- d) explain how to promote sales;
- e) identify different means of payment.
- 9.2.10.S11 Methods of buying and selling:
  - i) cash,
  - ii) credit,
  - iii) trade-in.
- 9.2.10.S12 Determination of the selling price i.e. profit margin;
- 9.2.10.S14 Promoting Sales:
  - i) Customer relations;
    - · honesty,
    - · courtesy,
    - · fair pricing.
  - ii) Giving credit, discounts and gifts:
  - iii) Advertising;
    - · displays,
    - · posters and signs,
    - · press media.
- 9.2.10.S15 Means of payment;
  - i) cash,

- ii) cheques,
- iii) money and postal orders.
- 9.2.11.S BOOK-KEEPING (6 HOURS)
- 9.2.11.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) keep simple records;
- b) plan and control simple budgets.
- 9.2.11.S11 Record Books;
  - i) cash book,
  - ii) stock record.
- 9.2.11.S12 Elementary Budgeting:
  - i) sources of expenses,
  - ii) estimation of expenses;
    - · capital expenses,
    - · revenue expenses.
  - iii) profit and loss account.
- 9.2.12.S SCIENCE AND TECHNOLOGY (4 HOURS)
- 9.2.12.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) state the importance of Science and Technology in National Development;
- b) appreciate the use of various types of appropriate technology.
- 9.2.12.S11 Importance of Science and Technology in National Development;
  - i) conservation of resources,
  - ii) need for innovation and improvisation.
- 9.2.12.S12 Various types of Appropriate Technologies;
  - i) solar energy,
  - ii) biogas,
  - iii) fuel-saving jikos and ovens,
  - iv) charcoal refrigerator,
  - v) improved fireplaces,
  - vi) sisal and sheeting materials,
  - vii) sisal and cement storage drums,
  - viii) manual water pumps,
  - ix) food processing and preservation,

- x) manual maize threshing machines,
- xi) windmills,
- xii) charcoal—burning equipment.

# 9.2.13.S GOVERNMENT (2 HOURS)

### 9.2.13.S1 Specific Objectives

At the end of this topic, the trainee should be able to:-

- a) state the structure and role of the three arms of the government of Kenya;
- b) state the structure and the role of Local government in Kenya.
- 9.2.13.S11 Structure and functions of the three main arms of the government;
  - i) The legislature,
    - · National Assembly,
    - · The Constitution,
    - · Elections.
    - · Structure and functions of Ministries.
  - ii) The Judiciary;
    - · the structure of the judiciary,
    - the role of the judiciary,
    - · functions of the law courts.
  - iii) The Executive;
    - · structure of the Civil Service.
    - · the functions of the Civil Service.
    - the role of the Public Service Commission.
- 9.2.13.S12 Local Government:
  - i) structure of the local government,
  - ii) functions of the local government.

### **FQUIPMENT**

### 1. Hardware

Radios (transistor)
Portable Tape Recorders
Overhead Projectors
Cameras, films
Film Projectors
Slide Projectors

### 2. Software

Relevant Books
Legal documents (e.g. official forms, receipts)
Invoices, L.P.O's, (order-sheets or books requisitions sheets)
Reports
Magazines, journals and periodicals
Charts
Tapes

### 3. Sports Equipment

Footballs, Volleyballs, Netballs, Balls, Nets Hockey Sticks Tennis Rackets Indoor games e.g. scrabble, chess, darts Draughts

### 4. Musical Equipment

Traditional Musical Instruments: (e.g. Nyatiti, Kayamba drums, guitars)
Piano, organ flutes

### 5. Trainee Kits

Sports-T-Shirts, shorts, tennis, shoes, socks