HEALTH EDUCATION

1. PREAMBLE

This examination syllabus is drawn from the Senior School Health Education curriculum and directed towards empowering students to have correct, adequate and timely information that will make them acquire attitude and practices which will restore, maintain and promote positive health.

Since Health Education is skill-based and involves knowledge, belief, attitude and practices, evidence of involvement in practical work will be determined through practical test. It is therefore, essential that the examination syllabus is used in conjunction with the Teaching curriculum.

2. OBJECTIVES

This examination syllabus is designed to assess the extent to which candidates have been able to:

- (1) acquire basic knowledge of the human body and necessary skills for maintenance of health:
- (2) acquire positive health practices in the school and community;
- (3) identify and show the ecological relationship between man and his environment as a basis for preventing diseases;
- (4) make observations and draw inferences from practical experiences that ay have implications for health;
- (5) develop readiness necessary for professional training in health related careers.

3. <u>SCHEME OF EXAMINATION</u>

There will be three papers – Papers 1, 2, and 3, all of which must be taken. Papers 1 and 2 will be a composite paper to be taken at one sitting.

- **PAPER 1** Will consist of fifty multiple choice objective questions, all of which must be taken in 1hour for 50 marks.
- **PAPER 2** Will consist of two sections, Sections A and B.

<u>Section A</u> will consist of six short-structured questions, all of which must be answered for 30 marks.

<u>Section B</u> will consist of three essay questions out of which candidates will be required to answer two questions for 40 marks. The paper will last 1 hour.

PAPER 3 - Will be a practical test for school candidates and an alternative test of practical work for private candidates. The paper will last for 1¾ hours and carry 80 marks.

DETAILED SYLLABUS

CONTENTS	NOTES
A. HISTORY AND DEVELOPMENT OF HEALTH EDUCATION 1. Meaning and setting for health Education.	Students should visit to observe community, health facility and work place base, health education programmes and services.
(a) Meaning (b) Setting:	
(i) home-based; (ii) school-based; (iii) community-based; (iv) health facility-based; (v) work place-based.	
(c) Meaning of health promotion.	
B. HUMAN ANATOMY AND PHYSIOLOGY	
1. Cells and tissues of Human Body.	
(a) Types of cell:	
(i) somatic cells; (ii) sex cells.	Structure of a typical animal cell and functions of its parts should be discussed.
(b) Cell division:	
(i) Mitosis; (ii) Meiosis	Differences between mitosis and meiosis should be emphasized.
(c) Cell differentiation: Formation of tissues, Organs and Systems.	Mention should be made of epithelial, connective and muscular tissue, an organ and a system should be explained.

CONTENTS	NOTES
(d) Growth and development	(1) Differences between growth and development should be emphasized.
2. Sense Organs(a) Structure and functions of the follow sense organs:	(2) Factors that affect growth and development should be discussed.
(i) eye; (ii) ear; (iii) skin; (iv) nose; (v) tongue.	Accommodation should be discussed. Process of hearing and balancing should be discussed
3. Systems of the Body	
 (a) Skeletal system and muscles (i) The general plan of the axial a appendicular skeleton. (ii) Functions of the skeletal system 	A chart/model of a human skeleton should be examined.
(iii) Joints: Structures and types.	should be identified. (1) Emphasis should be on synovial joint. (2) Location of the different types of joint should be identified. (3) Specific examples should be used to illustrate the classes of levers.
(iv) Structures and types of muscle tissues.	
(v) Movement.	
(b) Circulatory System(i) Structure and functions.	Reference should be made to origin and insertion of muscles in relation to movement.
CONTENTS	NOTES

		(I) Heart	Candidates should examine the heart of a dissected mammal.
		(II) Blood and lymph vessels	Pulse rate should be counted. The web of a toad/frog should be examined with a hand lens to observe the capillaries. The importance of lymph nodes should be mentioned.
	(ii)	Composition of blood and lymph	Prepared slides of blood should be observed under microscope.
circulation	(iii)	(I)Blood and lymph	Pulmonary and systemic circulation should be emphasized.
		(II) Process of blood clotting	
	(iv)	Blood groups, rhesus factors hemoglobin, genotype.	The relevance of these factors in relation to blood transfusion should be mentioned.
	(v)	Diseases disorder of the circulatory system and their causes; sickle cell anaemia, leukaemia, haemophilia arteriosclerosis, hypertension, coronary thrombosis and stroke.	(1) Heredity aspect of sickle cell andhaemophilia should be discussed.(2) Prevention of anaemia and arteriosclerosis should be discussed.
(c) Digestive system		estive system	
	(i)	Organs of the digestive system and their functions.	Candidates should examine the alimentary canal of a dissected mammal. The location and function of accessory organs of digestion should be emphasized.
	(ii)	Process of digestion	Digestive enzymes should be discussed in relation to substrates and end-product.
		CONTENTS	NOTES
	(iii)	Absorption, assimilation and metabolism.	(1) Mentioned should be made of tissue respiration in relation to metabolism.

	(2) Osmosis and diffusion should be demonstrated and their importance in absorption should be emphasized.
(iv) Diseases/disorders of the digestive system and their prevention.	Importance of proper eating habits and the effects of over-eating and under-eating should be discussed.
(d) Excretory System (i) Structure and functions of the kidney and skin.	(1) Candidates should examine the parts of the urinary system of a dissected mammal.(2) Candidates should examine prepared slides of the skin under the microscope.
(ii) Process of urine formation.	Reference should be made to the excretory functions of the lungs. The use of dialysis machine for kidney failure should be mentioned.
(e) Respiratory System (i) Structure and functions of the respiratory system	Candidates should examine the respiratory organs of a dissected mammals.
(ii) Process of respiration (I) Mechanism of breathing (II) Gaseous exchange.	Experiment to demonstrate the inhalation and exhalation of air should be performed. Total, complemental and residual air should be explained. Experiment to show that expired air contains more carbon dioxide and water vapour should be performed.
CONTENTS	NOTES
(III) Tissue/Cellular respiration. (iii) Diseases/disorders of the respiratory system and their	

control.	
(f) Nervous System:	
(i) Structure and functions of the	The brain, spinal cord and nerves should be discussed.
components of the nervous system	
(ii) Voluntary and involuntary actions	
(iii) Diseases/disorders of the nervous	The reflex arc should be studied.
system.	
(g) Endocrine System: Location of the different endocrine glands,	
the hormones produced and their	(1) Characteristics of endocrine glands should
functions.	mentioned.
(h) Homeostasis	(2) Charts/models should be used to study the
	location of the glands.
	(3) The effects of over- and under – secretion of
Physiological factors affecting	hormones should be emphasized.
homeostatis	(1) Body temperature, blood sugar level, water
nome of the last o	balance, electrolytes balance, pH and blood
	pressure should be highlighted.
4. Posture and Postural Defects.	(2) Candidates should test urine with litmus paper
(i) Definition;	and also, count pulse rate.
(ii) Characteristics of correct posture.	(3) Mention should be made of the positive and
	negative feed back control system.
(iii) Determination of correct postures	Posture should be related to the following: sitting;
•	standing; walking and lifting.
(iv) Types of postural defects:	
Flat foot; scoliosis, kyphosis and	The roles of nutrition and exercise as determinants of
lordosis	correct posture should be discussed. (1) The causes of postural defects e.g. habits,
	accidents, heredity and diseases should be
CONTENTS	discussed.
	NOTES
(-) Effects of:	(2) The value of earth and 11 1 27 1 1
(v) Effects of incorrect posture on physical	(2) The roles of orthopaedichospital and physiotherapy unit in the correction of postural
appearance, position and functions of	defect should be mentioned.
body organs.	defect should be mentioned.
C. PERSONAL HEALTH	

1. Meaning and importance of physical health. 2. Personal hygiene 3. Promotion and maintenance of health: (a) Definition Care of body parts including the teeth, mouth, hair, hands and nails should be discussed. (b) Factors and their roles in the maintenance of health. 4. Health Screening (a) Eye defects and their corrections. Myopia; Hypermetropia; The use of snellen chart for vision screening should be Astigmatism; mentioned. The roles of eye specialist in the correction of the defects should be discussed. Presbyopia; Squints (cross eye). (b) Auditory defects Otitis media should be mentioned (c) Conductive impairment The use of tuning fork; audiometer, guitar strings and wrist watch in auditory screening should be mentioned. Also, mention should be made of the sign language. (ii) Neurosensory impairment (iii) Disorder of the skin (iv) Care of the eye, ear and skin. 5. Dental health education Meaning and types (i) (ii) Types of human teeth (iii) Teeth diseases **NOTES CONTENTS** Structure and functions of the different types of teeth should be discussed. Dental caries and gingivitis should be mentioned. D. COMMUNITY HEALTH 1. Community health services (a) Definition (b) Providers: (i) Orthodox services e.g. primary health

		care;	Advantages and disadvantages of traditional medicine
	(ii)	Traditional services e.g. bone setters, birth attendance.	should be mentioned.
	(c) Comm	nunity efforts in health promotion.	
2.	School he	ealth programme	Awareness campaign should be discussed.
	(a) Defin	ition	
	(b) Comp	oonents	
	(i)	Skill-based health education	
	(ii)	Healthful school environment	
	(iii)	School feeding services	Both physical and biological environment should be
			discussed.
	(iv)	School health and nutrition services	
	(v)	School, home and community	
		relationship.	
	(c) Goals	and Objectives.	
		ges for promotion (initiatives)	
	(G) Ziiiku	ges for promotion (initiatives)	
	(i)	Health Promoting School (HPS)	
	(ii)	Child-Friendly School (CFS)	
	(iii)	Focusing resources on Effective	
	` '	Schools Health (FRESH)	
	(iv)	Life Skills (LS)	
	(v)	Education for All (EFA)	

CONTE	NTSNOTES	
3.	Family health (a) Meaning (b) Different aspects of family health: Matenal and child health (c) Family size and budgeting	Antenatal care, immunization, oral rehydration therapy (ORT), breast feeding and safe motherhood should be discussed.
4.	Ageing and death education (a) Definition and features of the elderly. (b) Ways of relating with the elderly. (c) Meaning of grief and death. (d) Common causes of death.	
5.	Epidemiology and vital statistics (a) Definitions	Candidates should be able to define epidemiology, vital statistics and population dynamics.
	(b) Components of vital statistics(i) Birth rate(ii) Mortality rate(iii) Morbidity rate	The importance and use of health records should be stressed.
	 (c) Uses of the major components of vital statistics. IVIRONMENTAL HEALTH Housing. (a) Criteria for good housing to include siting, ventilation, lighting and sanitation. 	Effects of poor sanitation and pest infestation in home should be discussed.
2.	(b) Components of a standard house.Water supply(a) Definition and sources(b) Purification and uses.	Effects of substandard housing on health should be discussed.
3.	Waste disposal (a) Meaning (b) Types: (i) refuse; (ii) Sewage. (c) Methods	Sources should include rain, borehole, rivers, streams, springs, well pond, pipe borne water
4.	Pollution (a) Meaning (b) Types: air, water, soil and noise.	Advantages and disadvantages of each method should be discussed.

CONTENTSNOTES	
(c) Meaning and sources of pollutants.(d) Health consequences of pollution.	
(C) Industrial occupation(a) Meaning(b) Programmes: Industrial health services(c) Occupation hazard	The need for health care and rehabilitation should be discussed.
(D) Pests and vectors control(a) Meaning(b) Habitats of pests and vectors(c) Harmful effects and control.	The need for health insurance schemes should be stressed. Students should be able to identify to differentiate between pests and vectors.
F. NUTRITION AND FOOD NUTRIENTS Nutrition (i) Classes, sources and functions of food nutrients. (ii) Caloric value of food nutrients	Tests for starch, simple and complex sugars, proteins and fats should be carried out. Local example of sources of food nutrients should be mentioned.
 2. Balanced/adequate diets (a) Definition (b) Classification (c) Nutritional problems 	Caloric needs in relations to age, occupation and health condition should be discussed. Food deficiency diseases should be emphasized. Factors responsible for unbalanced diet and effects
3. Factors influencing feeding habits/choice of foods	associated with poor diet should be discussed.
4. Water5. Nutritional processes: ingestion, digestion,	Factors should include: availability, religion education, age, belief, health condition and cost The role of water in relation to nutrition should be discussed.
absorption, assimilation and metabolism and defecation/ejection.	
6. Beverages(a) Definition(b) Types and effects	Negative and positive effects should be stressed. Nutritional value of non-alcoholic beverages should be stressed.
7. Diet for different group of people: children, male adolescent; female adolescent;	Charts should be used to show diets for the different groups of people.
athletes; pregnant woman; adult and aged. CONTENTS	NOTES

Food handling; cleanliness of cooking utensils and surroundings should be discussed. Effects of poor food handling should be stressed.

Effects of washing, boiling, frying, baking and

roasting should be discussed.

- 8. Food hygiene, preservation and storage
 - (a) Meaning and Principles of food hygiene
 - (b) Effects of methods of food preparation on nutrients.
 - (c) Methods of food preservation: Smoking/drying/dehydration, Freezing/refrigeration, addition of chemicals/sugar salts, Bottling/pickling/canning.

G. SAFETY EDUCATION AND FIRST AID

- 1. First Aid
 - (a) Meaning/aims and principles of first aid
 - (b) First aid kit
 - (c) Specific emergency conditions cuts; Wounds; bleeding dislocation; fractures; burns; scalds; shocks; asphysia/suffocation; poisoning.
 - (d) Agencies providing First Aid Services.
 - (e) Disaster
 - (i) Meaning and types
 - (ii) Disaster relief activities
 - (f) Accident
 - (i) Types and causes
 - (ii) Prevention
 - (g) Disability and rehabilitation
 - (i) Meaning
 - (ii) Types and prevention.

CONTENTS

H. DRUG, ALCOHOL AND TOBACCO

NOTES

Mention should include drug abuse, drug dependence, drug misuse, drug addiction, self medication, alcoholism, rehabilitation

This should include oral, injection, inhalation, topical and anal.

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Prevention of drug abuse should be highlighted.

EDUCATION 1. Drug Education (a) Terminologies in drug education (b) Classes of drugs commonly abused. (c) Ways of taking drugs into the body (d) Drug abuse and consequences of self medication. 2. Behaviour altering chemicals (a) Tobacco (i) Components (ii) Effects of smoking on health. (b) Alcohol on health Effects of alcohol on health. (c) Drugs Effects of drug on health COMMUNICABLE AND NON COMMUNICABLE DISEASES 1. Diseases Meaning and classes of diseases. 2. Communicable diseases (a) Definition (b) Classification of communicable diseases. **CONTENTS NOTES** (i) Air-borne/Respiratory diseases Common cold, measles, whooping cough, poliomyelitis, tuberculosis and cerebro-spinal

meningitis, diphtheria.

The life cycle of each worm should be discussed 12 with the aid of a chart.

The life cycle of the pathogen of each disease

should be discussed.

- (ii) Water/food-borne diseases: Dysentery, cholera, typhoid fever and schistosomiasis, guinea worm
- (iii) Insect-borne diseases: Malaria, yellow fever, trypanosomiasis and filariasis
- (iv) Worm infection:
- (i) Ascarislumbricoides (round worm)
 - (ii) Taeniasolium (tape worm)
 - (iii) Ancylostomaduodenale (Hook worm)
 - (iv) Dracunculusmedinensis (Guinea worm)
- (v) Animal-borne diseases rabies, leptospoirosis
 - (vi) Contact diseases diseases;Gonorrhoea, syphilis, Tineapedis (athlete/foot),

Taeniacapitis (ringworm) leprosy, scabies and Acquired immune Deficiency Syndrome (AIDS)

- (c) Factors necessary for communicable diseases to occur:
 - (i) Causative agent
 - (ii) Susceptible host:
 - (iii) Transmission route (environment)
- (d) Non-communicable diseases:

Types

- (i) Deficiency (scurvy, pellagra, rickets, Kwashiorkor, anaemia, beriberi etc)
- (ii) Diseases due to growth in cells, heredity and normal disorders (cancer, diabetes, epilepsy, haemophilia, heart disease, hypertension. Ulcer, mental illness, sickle cell, rheumatism, infertility, asthma, albinism etc.

CONTENTS

J. FAMILY LIFE AND HUMAN SEXUALITY EDUCATION

1. Human Reproduction

(a) Definition of terms: Reproduction; sex gametes; ovulation; menstruation; fertilization; pregnancy and gestation.

NOTES

Secondary sexual characteristics in boys and girls should be discussed.

Candidates should observe/study the parts of the reproductive organs in a mammal. Menstrual cycle, sex determination, ante-natal care should be discussed.

Causes of infertility should be discussed.

Artificial insemination and text tube babies should be explained.

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Meaning of sexuality, sexuality education, sexual

reproductive health rights, gender and equality should be discussed.

	(b) Structures and functions of male and female reproductive organs.	
	(c) Conception, pregnancy, foetal development and child birth	
	(d) Diseases disorders of the reproductive system	
2.	Human Sexuality Education (a) Meaning and importance	
	Life skills (Assertive Negotiation and communication skills)	
3.	Family and family member roles. (a) The family – Meaning and types (b) Family size	
4.	Family life challenges: widowhood; single parenthood, pre-marital and extra-marital affairs, in-laws etc. (a) Agencies promoting healthy family living	
5.	Family planning and safe motherhood. (a) Meaning and need for family planning	

CONTENTS	NOTES
(b) Birth control methods (c) Safe motherhood	Candidates should be able to distinguish between family planning and safe motherhood.
5. Population Education (a) Meaning of population and population education.	Candidates should be able to distinguish between population and census.
(b) Census and its problems	Advantages of accurate census should be discussed.
(c) Small and large population	Meaning and the interrelationship between emotional health and social health should be discussed.
 K. EMOTIONAL AND SOCIAL HEALTH Interrelationship Attributes: (a) Definition of personality and personality traits (b) Personality problems and solution Mental health: (a) Definition (b) Promotion (c) Types and prevention (d) Importance L. CONSUMER HEALTH EDUCATION Consumer health products and services Laws protecting the consumer 	The attributes of emotional and social health should be discussed. Candidates should be able to identify personal problems and proffer solutions. Candidates should be able to state factors that promote mental health. Types, causes prevention and management of mental health should be discussed. Importance of mental and social health should be discussed. 1. The importance of checking label expiry dates on products before purchase should be
	highlighted. Various agencies promoting consumers health should be discussed. Mention features of genuine products and services

CONTENTS	NOTES
3. Factors influencing choice of consumer products; Authencity; cost; availability; accessibility; availability and advertisement.4. Consumer health care services	Various types of health services: traditional medicine, orthodox medicine, alternative methods of healing (acupuncture, yoga and faith healing) should be discussed.
5. Quacks and quackery meaning and types	 Different types of quackery such as mechanical, electrical, drug and cosmetic and medical quackery should be discussed The danger of quacks and quackery should be highlighted.
 Health insurance and advertisement of health products and services 	Meaning and importance of health insurance
 7. Nostrum: (a) Definition and types (b) Reasons for avoiding nostrum. 	2. State of health insurance 3. Advertisement of health products and consumer services. Types should include: (1) Health tonic; (2) Miracle substances; (3) Magic portions; (4) Amulets and talisman.

Materials needed in Health Education Laboratory/Examination

- 1. Models of various organs of the body;
- 2. Models of various parts of the body e.g. tooth;
- 3. Human skeleton:
- 4. Bones of the body;
- 5. Contraceptive devices;
- 6. Reagents for testing of starch, protein, fat;
- 7. Road safety signs;
- 8. Different types of safety elements;
- 9. Posters/charts of systems of the body e.g. reproductive, digestive, excretory;
- 10. First aid box and kits;
- 11. Fire extinguisher;
- 12. Sand bucket;
- 13. Photographs of health facilities and workers e.g. doctors, nurses, dentist at work;
- 14. Photographs of methods of sewage and refuse disposals;
- 15. Microscope
- 16. Stethoscope
- 17. Preserved worms;
- 18. Preserved pests and vectors
- 19. Photographs/posters of various types of communicable and non-communicable diseases;
- 20. Model/poster showing parts of the body;
- 21. Materials for personal hygiene e.g. toothpaste, comb, toothbrush;
- 22. Dissecting set
- 23. Photographs/posters of accident scenes;
- 24. Photographs/posters showing methods of food preservation
- 25. Photographs/posters showing disaster scenes;
- 26. Safety:
- 27. Photographs/posters of drugs commonly misused/abused
- 28. Tobacco products;
- 29. Hand lens;
- 30. Real objects/photographs/poster/charts of classes of food;
- 31. Photographs/posters showing correct postures
- 32. Photographs/posters showing postural abnormalities;
- 33. Poster/real object of sphygmomanometer, thermometer, litmus paper snellen chart.