



# MULTIPURPOSE HEALTH WORKER (MALE) / HEALTH INSPECTOR / SANITARY INSPECTOR COURSE (2 YEARS DIPLOMA COURSE)

# Syllabus and Guidelines (Regulations)

BOARD OF EXAMINATION
DIRECTOR OF PUBLIC HEALTH AND
PREVENTIVE MEDICINE
CHENNAI-600 006

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#### Introduction

#### Philosophy

Health is a fundamental human right. Maintenance of optimum level of health entails individual as well as social responsibility. However health can never be adequately protected by health services without active involvement of the community.

Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector plays a vital role in the rural and Urban health care delivery system. They should be sensitive and accountable to meet the health needs of the community. They should be able to provide accessible, equitable, affordable and quality health care. Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector can act as a catalyst for promoting inter–sectoral convergence in promotive and preventive health care.

Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector curriculum intends to prepare skilled and effective male health workers to achieve the goals of National Health Mission which aims at bringing about dramatic improvement in the health system and health status of the country. Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector would be trained in community health skills to practice basic health care at a defined level of proficiency in accordance with local conditions and to meet local needs. Further, the programme fits into the general educational pattern as well as health education system.

#### Purpose

The purpose of the Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector course is to prepare a Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector to function at the community level/with specific skills to fulfil the health needs of the community. They will be an active link between the community and the health care system.

#### General objectives:

On completion of the course, the Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector will be able to:

- 1. Appreciate the concept of holistic health and understand the influence of socioeconomic and environmental factors on the health status of the community.
- 2. Identify health problems/needs and resources in the community and mobilize social support for active participation of the community in health care activities.
- 3. Prepare and Maintain of Reports, Records and Registers.
- 4. Perform the Duties and Responsibilities of Public Health system (Urban Local bodies/ Rural Areas).
- 5. Implement Public Health Related Acts and Rules.
- 6. Be part of the health team for implementing International Health Regulations.
- 7. Date of Emerging and Re emerging infectious diseases and organise Preventive and Control measure.

- 8. Maintain environmental sanitation.
- 9. To know about Noise Pollution and Hazards and their Preventive Measure.
- 10. Provide preventive, promotive, restorative and emergency health care to individuals and community as required.
- 11. Render skilled health care services at home, clinic and school settings.
- 12. Provide need-based information and counselling related to health of individuals, family and groups.
- 13. Participate in all the National health and Family Welfare programmes at community level.
- 14. Act as a team member in the health care delivery system.
- 15. Coordinate and collaborate with the other departments and NGOs.
- 16. Manage the health centre including equipments and supplies, and maintain the records in order to provide quality people friendly services.
- 17. Record vital events and maintain prescribed registers.
- 18. To use computers and health related softwares.
- 19. Educate the community on health, nutrition and hygiene.
- 20. Organise Disaster Mitigation activities.
- 21. Any other work assigned from time to time.

#### **GUIDELINES AND REGULATIONS**

Guidelines for conducting Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector Training course.

- 1. **"Eligibility:** Any organization under the Central / State Government, Local Body, or a Private Trust, Mission, Voluntary Organizations registered under society registration Act or a Company registered under the Company's Act wishes to start Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector Course Training should obtain the approval and permission of the Health and Family Welfare Dept, Govt. of Tamil Nadu
- 2. Procedure for approving to start and conduct Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector Course Training.
  - **a)** Application shall be made to the Govt. Health and Family Welfare Department, Chennai along the required details and documents and original challan for remittance of non refundable Application fees of Rs.10,000/-. through the Director of Public Health and Preventive Medicine.
  - b) On receipt of the application the Director of Public Health and Preventive Medicine or his representative not below the rank of Joint Director of Public Health & Preventive Medicine (training) will undertake the first inspection to assess the suitability with regard to faculty position, physical infrastructure, laboratory facilities, syllabus, teaching facilities etc in order to grant approval to start the training.

- c) On recommendation with inspection report from the Director of Public Health and Preventive Medicine necessary permission orders will be issued by the Health and Family Welfare Department, Govt. of Tamil Nadu.
- **d)** On receipt of the approval and permission order, the respective institute will admit students.
- e) The Director of Public Health & Preventive Medicine and the Join Director (Training) will conduct inspection till the first batch completes the course. The Director of Public Health & Preventive Medicine as the Chairman, Board of Examination will give renewal orders every year after conducting regular inspection.
- f) The renewal order of Chairman Board of Examination is required every year to the institute up to 5 years or period to which extended by the opinion of the Chairman, permanent approval will be granted with terms and conditions.
- **g)** The concerned local body departments will take necessary action to insert the Name of Approved institute in their respective service rules (Corporations, Municipalities and Town Panchayats for the appointment).
- 3. APPROVAL OF MULTIPURPOSE HEALTH WORKER (MALE) / HEALTH INSPECTOR / SANITARY INSPECTOR COURSE ALREADY CONDUCTED BY PRIVATE ORGANISATION / TRUSTEE / UNIVERSITY / DEEMED UNIVERSITY.
  - i) The existing all training institution shall apply to the Government for recognition (or) starting the course. The

Director of Public Health and Preventive Medicine will inspect the concerned institution and recommend for the approval of the institute to the Health and Family Welfare Department, Government of Tamil Nadu as per Para (2).

- ii) The candidates those who have studied Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector course before the issue of the G.O. in other institutions not approved by Director of Public Health and Preventive Medicine and Health and Family Welfare Department, should undergo a screening test / qualifying examinations to be conducted as per syllabus by the Director of Public Health Preventive Medicine as Chairman Board of Examiner and successfully qualify the examination for which necessary certificates will be issued to them by the BOARD.
- iii) The Director of Public Health and Preventive Medicine will be the Chairman, BOARD of Examiner for all the Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector training institutes in Tamil Nadu.

#### 4. MINIMUM STANDARD REQUIREMENTS:

**a)** The Training Institute should be affiliated to a Community Health Centre and a Urban Local Body near to the institution in order to provide field practice and required orders shall be obtained from the competent local authority.

#### b) Teaching Facilities

Teaching facility for 20 – 40 students per year.

#### c) Teaching Faculties

S.No	Faculty Eligibility	Name of the Post	No. of the Post
1.	Health officer (or) Public Health Faculty with Diploma in Public Health (or) Master of Public Health (or) MD (Community Medicine) qualification	Principal	1
2.	Medical Faculty with MBBS., (Preferably with Public Health Qualification)	Medical Faculty	1
3.	Sanitary Engineer with BE.,/ME., qualification in Civil Engineering		1
4.	Entomologist, M.Sc., (Zoology) Diploma in Public Health Entomology with M.Sc., is preferable.	Entomologist	1
5.	Microbiologist, PG Degree in Medical / Applied Microbiology	Microbiologist	1
6.	Statistician with B.Sc.,/M.Sc., (Statistics/Maths)	Statistical Officer	1
7.	Health Educator Preferably with P.G Diploma in Health Promotion Education (OR) Public Health Qualification	Health Educator	1
8.	Health Inspector for every 10 Trainees (Should have H.I/S.I. Course Certificate issued by DPH & PM)	Field practice faculty 2 – 4	1
9.	Lab Technician with CMLT (or) DMLT (Qualified in Govt. Approved Institutions)	Lab Technician	1
10.	Mason	Mason	1

**Note:** There should be provision for appointing part time faculties for subject required. Salary of the teaching staff should be on par with government as for as possible. Independent family accommodation should be available in or near the campus of the Institution for 80% of the Faculties if necessary.

#### d) Non Teaching Staff

- 1. Superintendent / Accountant 1
- 2. Assistant 1
- 3. Typist 1
- 4. Driver 1
- 5. Cleaner 1
- 6. Office Assistant 1
- 7. Sweeper / Watchman 1

**Note:** There should be provision for temporary appointment of reliever in any post when required.

- **e) Office:** There should be individual furnished office rooms for: Principal, Faculties, and Ministerial staff.
- f) Class room: There should adequately large classrooms, accommodating required number of students (i.e., for 40 students size of the room should be 720 sq.ft) rooms should be well ventilated and properly lighted. There should be chairs with arms or desks according to the number required. Suitably placed black screen or board should be available in the classrooms.

### g) Laboratory with a demonstration room and adequate number of cupboards with necessary articles for demonstration.

1.	Anatomy / Physical Lab	400 Sqft
2.	Public Health Laboratory	400 Sqft
3.	Sanitary Engineering workshop	400 Sqft

The above labs should have full facilities for doing examination of blood, sugar, sputum etc. and with following studying materials.

- 1. Anatomical specimens and models / charts
- 2. Microscopic slides of all most common Parasites and insects
- 3. Different types of sprayers

#### h) Sanitary Engineering Workshop; there should be provision for Sanitary Engineering Practical such as

- 1. Casting of latrine plates
- 2. Operation and maintenance of Hand pumps
- 3. Different plumbing appurtenance and Sewerage appurtenances

#### i) Library

There should be a room of adequate size in order to accommodate 40 students at a time, with sufficient number of cupboards, library books and adequate numbers of chairs and tables for the students. Library to have updated edition of textbooks, referral books, few professional journals and general knowledge magazines as well as story books etc. in sufficient numbers.

#### j) Health Education Section

Must have a T.V. VCR/DVD, LCD projector, Computer facility, etc.,

#### k) Admission terms and condition

- 1. The minimum age for admission shall be 18 years on the 1st day of July of the year in which the application made.
- 2. The maximum age for admission shall be 30 years on the 1<sup>st</sup> day of July of the year in which the application made.
- 3. The minimum educational requirements shall be passing of Higher Secondary (+2) with Biology (or) Zoology (or) Botany

and must have passed Tamil language as a subject in 10<sup>th</sup> standard level.

- 4. Admission process of the Academic year commence on 1<sup>st</sup> June and completed on 31<sup>st</sup> August every year.
- 5. The course will start on 1st August every year.
- 6. Course fee should be collected as per Government Norms.

#### 1) Medical Fitness

Admission is subjected to satisfactory of medical examination report.

#### m) Budget

Institution should have separate budget to make provision for the following:

- 1. Salary of staff
- 2. Remuneration of external lecturers
- 3. Purchase of library books
- 4. Cost of fuel for the vehicle
- 5. Purchase of audio visual aids
- 6. Office expenses
- 7. Water, electricity, Telephone charges etc.
- 8. Contingency
- 9. Inspection and affiliation fess

#### n) Annual Admission

- a. Minimum students intake is 20
- b. Maximum students intake is 40

#### o) Duration of Course - 2 years (Two Semester)

The duration of the course will be 2 years from 2017-2018 onwards.

The Course period will be One year for candidates those who have a minimum of 5 years service and experience in Public Health Department or Local Body Public Health establishment.

#### p) Curriculum and Syllabus of the course

As approved by the Director of Public Health and Preventive Medicine and Board of Examiner Tamil Nadu

#### q) Examination

The first semester examination will be conducted at the end of 12 months. The second semester examination will be conducted at the end of 24 months. The Private Institutions/Trust/Universities/Deemed Universities should conduct 6 months mid term examination for the students. The marks of the exam should convert into 10 marks. This marks should be added to annual Board Examination marks as internal marks.

#### r) Transport

- a. Institution must have a 20-25 seated minibus
- b. There should be two-wheelers for students for field visit

#### s) Hostel Facility

The hostel has to accommodate 40 students with the following facilities:

- i. Safe drinking water facility should be available. All the rooms should to have adequate number of lights and fans.
- ii. Dining room to accommodate forty students at a time with a hygienic Kitchen, pantry and storing facility
- iii. There should be sufficient number of living rooms, to accommodate all students, preferably not more than two in a room.
- iv. Bathrooms and toilets sufficient in number (one for every 10 students).
- v. One visitors room with sitting arrangement and an attached toilet.
- vi. One recreation room with TV, radio & indoor games.
- vii.One sick room to accommodate 2-4 students, with toilet attached.

viii. Other facilities like hot water arrangement for winter and water cooler for summer should be there

ix. Hostel should have telephone connections.

#### t) Communication

Institution and hostel must have an independent telephone line

# MULTIPURPOSE HEALTH WORKERS (MALE) / SANITARY INSPECTOR / HEALTH INSPECTOR TRAINING DURATION, SYLLABUS AND EXAMINATION PATTERN

## 1. Duration of Course 2 years ( $1\frac{1}{2}$ year and 6 months field training)

	1st Year	2 <sup>nd</sup> Year
Total weeks	52 weeks	52 weeks
Vacation	4 weeks	4 weeks
Government holidays	3 weeks	3 weeks
Examinations (including preparatory)	3 weeks	3 weeks
Available weeks	33 weeks	33 weeks
Teaching hours per week	36 hours per week	36 hours per week
Total hours	1188 hours	1188 hours

#### 2. 1st YEAR - Hours allotment:

	Allocation of Hours							
Paper	Subject	Theory (Hours)	Practical (Hours)	Total (Hours)				
	Anatomy &Physiology	80	40	120				
Paper I	Microbiology	60	40	100				
_	Medical Entomology&							
	Parasitologi	70	40	110				
	Hygiene	40	20	60				
Donon	Environmental sanitation &							
Paper II	Waste Management, Biomedical							
	Waste Management	170	70	240				
	Nutrition and Nutrition education	60	20	80				

	Introduction to Public Health			
	and International			
	Regulation of Health	40	20	60
	Public health act	40	20	60
	Public health problems in			
	India with special reference to			
	Tamil Nadu	30	10	40
Paper III	Factors affecting health of Individual, Family and			
	Community	20	10	30
	National Health programmes			
	including HIV/AIDS,NRHM	30	10	40
	TOTAL	640	300	940

#### 3) 2<sup>nd</sup> YEAR - Hours allotment :

Allocation of Hours							
PAPER	Subject	Theory (Hours)	Practical (Hours)	Total (Hours)			
	Control of Communicable Diseases & Non Communicable Disease	180	70	250			
Paper IV	Basic Medicine &Treatment of Minor ailments	80	40	120			
	First Aid, Emergency care and Rehabilitation	80	20	100			
	Health and Vital Statistics, HMIS, Maintenance of records	50	40	90			
Paper V	Reproductive Child Health /NRHM	20	10	30			
	FW& Population Education	20	10	30			

	Behavioural Science	80	30	110
	Communication Skill &IPC &Counselling	40	60	100
Paper VI	IEC, AV Aids, Media	40	60	100
	Total	836	856	1692

#### 3) Filed Training (6 months) Compulsory (Including Practical Hours)

S.No	Number of weeks	Place of Training
1	4 weeks	Corporation
2	4 weeks	Municipality
3	4 weeks	DDHS Office
4	6 weeks	Block PHC, HSC, Town Panchayath
5	1 weeks	Computer Training
6	3 weeks	Schemes training at the Institutes

For service candidates deputed from Public Health Department and Local Bodies Department the Field Training will be 3 months.

#### 4. EXAMINATION

PART I – First Year EXAMINATION – ALLOTMENT OF MARKS

SUBJECT	ESSAY TYPE	SHORT NOTE	ORAL AND PRACTICAL EXAMINATION	INTERNAL ASSESSMENT	RECORD	GRAND TOTAL	MINIMUM PASS MARKS (50%)
PAPER - I	40	60	30	10	10	150	75
PAPER - II	40	60	30	10	10	150	75
PAPER - III	40	60	30	10	10	150	75

PART II - Second Year EXAMINATION - ALLOTMENT OF MARKS

SUBJECT	ESSAY TYPE	SHORT NOTE	ORAL AND PRACTICAL EXAMINATION	INTERNAL ASSESS MENT	RECORDS	HEALTH EDUCATION - AIDS	GRAND TOTAL	MINIMUM PASS MARKS (50%)
PAPER – IV	40	60	30	10	10		150	75
PAPER- V	40	60	30	10	10		150	75
PAPER- VI	40	60	30	10		10	150	75

#### III - Fiedl Training

Reports & Records	Field Performance		Total	Minimum Pass Marks
50	50	50	150	75

#### **COURSE SYLLABUS**

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#### PAPER -I

#### A. Anatomy and Physiology

#### **Objectives:**

#### To be able to:

- 1. Acquire sufficient knowledge of structure and function of the human body as is needed for an understanding:
  - the basis for hygienic living
  - preventive measures for maintenance of health
  - the effect of diseases and remedial measures.
- 2. Utilize knowledge of a structure and function in performing health care activities including first aid and treatment of minor ailments.

#### Units:

1. The body as an integrated whole organization of living things; cells; tissues, organs, cavities and body system; typical cell structures; properties of cell; living processes; tissues – types, structure and functions; the skin.

#### 2. The erect and moving body.

Skeletal system – overview of the skeletal system; bones; bone development and bone repair; axial skeleton; appendicular skeleton, surface anatomy and land-marks; structure and function of joints, types of joints.

Muscular system – overview of skeletal muscles; chief muscles and group of muscles, muscle contraction, properties of muscle.

#### 3. Integration and control of the body.

Nervous system - divisions of nervous system; brain and its functions, carnial nerves; spinal nerves.

#### 4. Maintaining the metabolism of the body

Circulatory system – blood composition, blood cells and plasma, haemoglobin, blood coagulation, bleeding time, blood grouping and cross matching, heart structure and functions, heart sounds and heart rates, circulation system and pulmonary; blood vessels, pulse, blood pressure; pressure points; arterial, venous and capillary systems.

Respiratory system - upper respiratory tract, structure and function; lower respiratory tract, structure and function; capacity of lungs, exchange of gases; respiration rate.

Digestive system - the alimentary tract, oral cavity, stomach small and large intestines; peristalsis; digestion-mechanical and chemical; salivary glands; liver, pancreas and gall bladder, enzymes, absorption and assimilation of foods.

Excretory system - Excretory organs, location structure and function; the urinary tract urine formation composition of urine, micturation water and salt balance.

Endocrine system – overview of the endocrine system; endocrine glands – location structure, functions. Body temperature regulation.

#### 5. Human reproduction:

Embryology, parental development; Maturation of reproductive organs, The male reproductive tract - external organs. The Female reproductive tract - external organs internal organs, menstrual cycle, hormones and reproductive.

Fertilization, pregnancy; later lactation.

#### Time schedule:

Theory

Practical:

> as per schedule of hour allotment.

Field visit

#### For practical:

- 1. Demonstration of skeletal system.
- 2. Demonstration of muscular system using charts.
- 3. Demonstration of various system using charts
- 4. Demonstration of reproductive organs by using media materials.

#### Field visit:

Observational visit to Medical college to see the Anatomy and physiology museum.

#### **B.MICROBIOLOGY**

#### **Objectives**

#### To be able to:

- 1. Acquire sufficient knowledge of microbiology for an understanding of the characteristics of disease producing organisms.
- 2. Understand the principles of microbiology underlying preventive and remedial measures.
- 3. Handle pathogenic material safely.

#### Units

1. Micro –organisms:

Classification of micro-organisms characteristics of bacteria, viruses conditions affecting the growth of bacteria parasites, fungi, yeasts, moulds.

2. Universal presence of micro organisms

Useful bacteria – Micro-Organisms in the soil, environment, Micro-organisms in the human body, normal flora, sterile area and cavities in the body, Micro-organisms in water, food, milk.

3. Sources and modes of infection

Sources of infection, mode of transmission, portals of energy and exist infection – factors which favour and winder infection, immunity; hypersensitivity, allergy, antigen – antibody reaction, vaccines.

4. Pathogenic micro-organisms

Pathogenic organisms transmitted from respiratory tract, pathogenic organisms transmitted from alimentary tract, pathogenic organisms transmitted through food-food-borne infectious; food poisoning blood-borne pathogenic organisms collection of specimens for bacteriological examinations.

5. Identification and destruction of micro-organisms Identifications, destruction and removal of macro organisms, Health worker's responsibilities, methods of identification, laboratory techniques, use of the microscope; methods of destructions – physical and chemical agents; effects of cold and heat, practice in sterilization methods;

#### Time schedule:

Theory :

Practical:

> as per schedule of hour allotment.

Field visit

**Practical:** Demonstration of Microscope.

**Field visit:** Observation visit to Medical college to see the Microbiological laboratory.

#### C.MEDICAL ENTOMOLOGY

#### Introduction

Classification of living things – Biological sciences and physical sciences. Animal kingdom and plant kingdom. An outline of the main sub divisions under each kingdom. Procedure followed in the classification of animals phylum and the sub groups. (various toxons) Binominal nomenclature of Linnaeus. Definition and scope of the subject. Explanation of the term morphology, anatomy.

#### Fundamentals of Medical Entomology:

Arthropods of Public Health Importance. Definition of vectors, Infesters and vectors. Classification of the vectors (types of vectors) Phylum – Arthropod – general features and classification. Class- Insects – Important character and additional characters. Metamorphosis – Types of metamorphosis. Explanation of the terms, larva, pupa, nymph and cocoon. Definition of breeding places and Instar.

#### 1. Mosquitoes:

An outline of the morphology of the mosquito and developmental stages. Classification of mosquitoes and the important genera. With a detailed account about the differences between Anopheles and Culex in all the stages.

Description of adult, egg, larva and pupa. Life – cycle – Breeding places and stages of Anopheles, culex, Aedes, Mansonoides mosquitoes.

Bionomics: General bionomics of the mosquitoes. Bionomics of Anopheles, culex, Aedes and Mansonoides.

#### Public Health Importance:

Important diseases transmitted by mosquitoes. Mechanism of transmission. Bionomics of Vector species of malaria, Filaria and Dengue, Japanese –B – encephalitis and yellow fever.

Control: An outline of the various mosquito control measures.

**2. Sand fly**: An outline of the morphology of the Sand fly. Life-cycle. Important breeding places – stages in the life-cycle.

Bionomics: A short account.

Public Health importance: Diseases transmitted and mechanism of transmission. A short account about phlebotomus - argentipus, Control - An outline of Sandfly control.

**3. House Fly**: The general feature of a typical fly. Morphology of the house fly.

Life – cycle – A detailed account about the breeding places, with special reference to the rural areas and the urban areas. Stages. Morphology of the egg, larva and pupa. The habitat of the housefly larva.

Bionomics: An outline of the bionomics, with special emphasis on its habits which render the housefly the most important of the mechanical vectors.

Public Health importance: The important diseases transmitted by the housefly. Mechanisms of transmission.

Control: An outline of the various control measures, Importance of their relative importance and utility, environmental sanitation.

- **4. Tsetse fly**: Distribution . A brief account of the morphology, lifecycle, bionomics, public health Importance and control.
- **5. Bed bug**: Morphology general features. Life-cycle and Bionomics. Public Health Importance.

Control: An outline of the various measure.

**6. Louse**: The general features of the louse. The special nature of he Mouth parts and the modification of the legs.

Pediculus – humanus: Morphology and Life-cycle, general bionomics and comparative binomics of the head louse (Pediculus humanus capitis) and the body louse (Pediculus humanus corporis or pediculus humanus humanus).

Public Health importance – Important diseases transmitted – Mechanism of transmission.

Control: For head louse and body louse.

Phthirus Pubis: An outline of the morphology, life-cycle bionomics and Public Health importance.

**7. Fleas:** The general morphology of the flea. Combed fleas and combless fleas. Life-cycle of the flea. Bionomics of the fleas in general. Flea index and Flea infestation rate.

A short account of the bionomics of Pulex, Xenopsylla, Ctenocephalides, and Nosopsylla.

Public Health Importance – Diseases transmitted by the fleas. Mechanism of transmission.

Blocked flees - Totally blocked flea and Partially blocked Flea.

A short account about Xenopsylla cheopsis.

Control: An outline of the Control measures.

#### Crustacea

#### General features of the crustacean. Common examples.

- 1. Cyclops: Morphology, life-cycle, bionomics, Public Health importance and Control.
- 2. Archnida

General features of the Arachnida. Common examples. The common features of the order-Acarida-Mouth parts. Shorts comparison between Ticks and Mites.

**1. Ticks:** Morphology and life-cycle. Differences between the Hard Ticks and the Soft ticks – a few examples for each groups.

Bionomics – general bionomics of the ticks. Comparative bionomics of Hard ticks and Soft ticks.

Public Health Importance – Diseases transmitted and mechanism of transmission.

Control - a brief outline.

#### **2. Mites:** general features.

Trombicula – A brief outline of the morphology, life-cycle and bionomics. Public Health importance and mechanism of transmission. Control Sarcoptes-scabiei. Morphology and life-cycle. Public Health Importance and control.

Demonstration classes: Demonstration of specimens – and some of the important anatomical parts, eggs, larva and pupas.

#### D. PARAS ITOLOGY

**Introduction:** Explanation of the terms; Parasite, Host, commensals, endoparasite, ectoparasite, principal hose. Supplementary Host, and Incidental Host. Definition of Definitive Host and Intermediate Host. Life-cycle - A sexual and sexual reproduction. The various ways by which the parasite causes harm or trouble for the host.

Parasitology - Definition and scope.

#### **PROTOZOA**

General features. An outline of the important subgroups. Amoebia, Mastogophora, Sporozoa and Ciliata.

1. Malaria Parasite: The important species of Human Malaria Parasite.

Life cycle: Detailed account.

Public Health Importance – Types of Malaria Control.

- **2. Entamoeba histolytica.** Distribution, Habitat, Morphology, Life-cycle, Public Health Importance and Control.
- **3. Entamoeba** Coli A short account.
- **4. Entamoeba gingivalis:** A very brief account
- **5. Leishmania donovani** Distribution, Habitat, Detailed Life-cycle, Public Health Importance and Control. A short reference to Leishmania tripica and Leishmania-brasiliensis.

- **6. Trypanasoma Gambiense:-** Distribution, Habitat, Detailed Life-cycle, Public Health Importance and Control. A short reference to Trypanasoma Gambiense.
- **7. Giardia Lamblia** A brief account
- **8. Trichomonas hominis** A brief account
- **9. Balantidium Coli** A short account

#### Trematoda

General features of the Platyhelminthes. Trematoda and Cestoada Compared. General Characters of the flukes.

**1. Fasciola hepatica:** Distribution, Habitat, Detailed Life-cycle, Public Health Importance and Control. A short reference to Clonorchis sinensis Fasciolopsis buski and Paragonimus westermani.

#### 2. Schistosoma: Mosphology

Important species found in man. A short comparative account of schistosoma – haemotobium. Schistosoma mansoni and schistsoma Japonicum, with reference to Distribution, Habitat and structure of the eggs. Life-cycle. Public Health Importance and control.

#### Cestoda

General morphological features. Description of immature, proglottides, Mature proglottides and gravid proglottides.

- 1. Taenia solum Distribution, Habitat, Morphology and Detailed Life-cycle, Public Health Importance and Control.
- 2. Taenia-Saginata, Distribution, Habitat, Morphology and Detailed Lifecycle, Public Health Importance and Control.
- 3. Echiniciccus granulosus: Distribution, Habitat, Morphology and Detailed Life-cycle- structure of the hydatid cyst. Public Health Importance and Control.
- 4. Diphyllobthrium latum: Distribution, Habitat, Morphology and Detailed Life-cycle, Public Health Importance and Control.

#### Namatoda

General features of Nemotada – general characters.

1. Hook worm: Habitat and Morphology

The two common species Ancylostoma duodenale and Necator americanus – a comparative account with referene to distribution and Morphology. Life cycle – A detailed account about the life-cycle. Favourable and unfavourable conditions for the development of the hook work larvas.

Public Health Importance and control, Hook worm Survey – classification of hook worm lead.

- 2. Ascaris Lumbricoides: Distribution, Habitat, Morphology, Detailed Life-cycle, Public Health Importance and Control.
- 3. Trichuris Trichiure: A short account about Distribution, Habitat, Morphology Life-cycle and Public Health Importance.
- 4. Enterobius Vermicularis: Distribution, Habitat, Morphology, Life-cycle, Public Health Importance and Control.
- 5. Trichinella Spiralis: A brief outline of the Distribution, Habitat, Morphology and Life-cycle, Public Health Importance and Control.
- 6. Wuchereria: General morphology and habitat.

A comparative account of Wuchereria – bancrofti and Burgiamalayi with reference to Distribution, habitat and morphology.

Life Cycle: A detailed account of the life-cycle. Microfilarial periodicity. Public Health Importance and Control

7. Dracunculus medinensis: Distribution, Habitat, and Morphology. Lifecycle: A detailed account of the life-cycle. The relative frequency of the sites of exit of the female worm. Public Health Importance and Control.

Diagnostic Methods: An outline of the various common diagnostic methods for infection with the parasites mentioned in the syllabus.

8. Virus - Dengue, Chikungunya, Japanese Encephalitis

#### Time schedule:

Theory : Practical :

as per schedule of hour allotment.

Field visit

#### **Demonstration class:**

Demonstation of (actual) adult stages of the different worms, certain important anatomical part such as scolex, Mature Proglottides, and gravid proglottides, Infective larvas of hook worm, breed capsules, cycticerus, encapsuled larvas of Trichinella spiralis, and Micro-filaria.

Demonstration with wax models of the various worms, the various stages in the life-cycle and wax models to explain the life-cycle of the various parasites.

Baermann's apparatus and Stoce's apparatus.

#### PAPER II

#### A. HYGIENE

#### Objective:

#### To be able to:

- 1. Increase understanding of the significance of hygiene and healthful living for promotion and maintenance of health.
- 2. Develop the ability to utilize this knowledge for promoting positive health practices.

#### Units

- 1. Introduction of hygiene and healthful living. Concepts of health and disease factors influencing health and healthful living. Health habits and practices recognizing positive and negative practices in the community. Scientific principles related to maintenance of
  - normal circulation
  - normal respiration
  - normal digestion and elimination
  - normal skeletal alignment, joint function and motor functions.

#### 2. Personal hygiene

Skin care, cleanliness, clothing, care of the hair, prevention of pediculosis, Dental care and oral hygiene, care of hands, hand washing, care of nails, hygiene of elimination, menstrual hygiene.

#### 3. Physical health

Posture, prevention of postural defects; exercise, rest, relaxation and sleep. Care of the face, foot wear, ears of eyes, nose, throat, food values, nutritious diet, selection, preparation and handling of food.

#### 4. The periodic health examination.

The health examination, health record, immunity and infections, immunization, detection and correction of defects, prevention and early treatment of common ailments common colds indigestion, headache.

#### 5. Health in the home

The home as a centre for healthful living household measures for disposal of refuse, waste latrines and sanitation ventilation safely in the home common home hazards. Sanitation in animal shed, insects and pests.

#### 6. Mental Health and Hygiene

Introduction, factors contributing to mental health characteristics of mentally healthy and unhealthy person Developmental tasks basic needs, emotional stability.

Role of Health worker (Male) in the field of mental health and hygiene in the community. National mental health programme, community mental health programme. Recent research and development on mental health and mental hygiene.

#### 7. Mental hygiene and health in infancy.

Ensuring mentally healthy growth in infancy need for comport security protection. Mental hygiene approach to some problems – feeding weaning, thumb-sucking toilet training.

#### 8. Mental hygiene and health in early child hood.

Ensuring mentally health growth in early childhood, need for security affection, love play, constructive activities, adventure. Mental health approach to common problems. Negativism, temper tantrums sleep disturbances bedwetting aggressiveness, fears, over submissiveness.

#### 9. Mental hygiene and health in later child hood

Ensuring mentally healthy growth in later child hood; need for friendship, games and play, affection, encouraging self expression; recognition, respecting individual differences. Mental hygiene approach to some problems – Speech problems reading difficulties, learning problems day creaming.

#### 10. Mental hygiene and health in adolescence

Ensuring mentally healthy growth in adolescence, need for security recognition, understanding, acceptance, preparation for girls for menstruation; six education, developing vocational goals, nubbins discussions and conversation adventures, organized games, dependence independence conflict. Mental hygiene approach to some problems in adolescence, rebellious behaviour aggression.

#### 11. Mental hygiene and health in adulthood

Ensuring mental health in adulthood, need for self realization; satisfactions on the job; recognition social relationship; marriage marital life, parental responsibilities.

Mental hygiene approach to some problems – job dissatisfaction, Marital problems, failures in achievement of aspirations.

#### 12. Mental hygiene and health in old age

Ensuring mental health in old age; need for preparation for retirement, economic insecurities, loss of role status related to job earnings, adjustments in relation to physical condition.

Mental hygiene approach to some problems developing interests, keeping active participation in community life and family affairs.

#### 13. Climate and Health

#### Time schedule:

Theory :

Practical : > as per schedule of hour allotment.

Field visit

#### For practical:

- 1. Observational visit to the psychiatric ward in nearest medical college hospitals.
- 2. Community mental health centre at Sackalwara in Bangalore (NIMHANS)
- 3. Mentally retarded school
- 4. District Rehabilitation Centre.

#### B. Environmental Sanitation & Waste Management (Solid / Biomedical/ Plastic) & Air Pollution

- **(i) Introduction:** Scope of Public Health Hygiene and sanitation modern Public Health practice The Health Officer and his subordinates the Sanitary Engineer and his subordinates.
- **(ii) General Engineering:** Basic elementary principles of surveying leveling, drawing, estimating and of the general nature of building materials and building construction.
- (iii) Water: Purposes of requirements, Sources of supply their characteristics lakes, tanks, wells (Shallow and deep) springs, tube-wells; conservation of sources, collection, storage and distribution general principles. Impurities in water, physical, chemical, bacterial, parasitic. Effects on health diseases conveyed by water. Collection and examination of water samples and Interpretation of results. Purification of water filtration and infiltration gallery; chemical and physical methods softening; disinfection.
- **(iv) Air and Ventilation:** Air composition of importance to health; pollution of air, sources of impurities in air and their effect on health. Physiological basis of ventilation effect on health, Physiological basis of

ventilation effect on health of humidity, temperature, air movement, altitude and pressure conditions. Standards of ventilation, their significance and application method of ventilation, air conditioning. Examination of ventilation of building katathermometer, cooling and heating.

- v) Solid Waste Management: Solid Waste Management Sources and Classification of Solid Wastes Generation of Solid Wastes Norms for waste generation Characteristics of Municipal Solid Wastes (Physical and Chemical) Solid Waste Management System Objectives and Principles of Municipal Solid Waste Management Stages of Municipal Solid Waste Management Tools, equipments and vehicles specifications Processing of Municipal Solid Waste Public and Private Partnership Final disposal of Solid Wastes different types Rules related to Solid Waste Management.
- vi) Bio-Medical Waste: (Handling and Management) Sources and Different categories of Bio-Medical Wastes Types of Bio Medical Wastes Treatment and disposal option Colour coding and Types of contains of Bio Medical Wastes Labels for Bio Medical Wastes containers and Bags Standard for treatment and disposal of Bio Medical Wastes Standard for incineration Rules related to Bio Medical Wastes.
- vii) Plastic Waste Different types of Plastic and their usages conditions for plastic manufacture and usage- Food grade plastics and colouring matters Marking and Labeling on plastics Recycling Rules related to Plastic Wastes management and handling.
- viii) Excreta: Collection, Latrines different types removal implements
  carts disposal methods trenching, composting incineration, septic tanks pail depots personnel and organization.
- **ix)** Liquid Filth: Collection cesspols removal sewage carts open drains disposal leaching cesspools, soak pit land irrigation dilution sewage, sewage system plumbing and house fittings trap, etc., sewers ventilation and cleansing disposal methods of sewage and trade wastes dilution land disposal artificial biological methods cleansing and its bearing on health soil pollution.

- **x) Disposal of the dead:** Various methods of disposal all advantages and disadvantages sites and soils for burning and burial grounds disposal of carcasses.
- (xi) Personal Hygiene:- Habits and customs their relation to health cleanliness-clothing-exercise-sleep, care of special organs-public baths-swimming pool sanitation-parks and play grounds.
- (xii) Camp Sanitation:- Fairs and Festivals labour camps-other temporary congregations-need for adequate public health arrangements, infectious diseases-methods of spread in congregations, detections, isolation, disinfection, immuno prophylaxis. Lay-out-accommodation-water supply Sanitary conveniences waste collection and disposal control of food establishment lighting control of animals.
- (xiii) Housing:- Soils their suitability and healthiness for various purposes sites for different purposes sanitary requirements of buildings in general and special requirements of: 1 Residence, 2. Schools, 3. Industrial buildings, 4. Public halls and places of public entertainment and special buildings connected with food trade. Scrutiny of plans-buildings regulations application of village and town planning and extensions civic surveys soils and buildings in relation of health.
- (xiv) Industrial and trades: Sanitation of industries, location, ventilation, water-supply, Sanitary convenience, lighting, etc., measures for the abatement of nuisances, dust, smoke, fumes, safety measures, etc., occupational diseases and their control, effects of trades and industries on health.
- (xv) Engineering in relation to diseases control: Rodent control rat elimation and destruction fumigation, rat proof construction fly control anti- fly measures destruction of flies fly traps poisons prevention of breeding manure- collection and storage protection of food from flies mosquito control life history and habits of mosquitoes malaria surveys recurrent, naturalistic and permanent methods of controlling larva and adult mosquitoes design of anti malaria drains in various circumstance canalization of flushing river training cleaning sub soil drainage filling adult spray killing methods residual spray

insecticides, preparation of larvicids and insecticides – screening of houses – relation between engineering, irrigation and malaria – malaria control for engineering projects etc., - filarial surveys – drainage in relation to filariasis, aedes control.

(xvi) Practical demonstration required: A Sanitary well, soakage pits, different types of sanitary latrines suitable for rural areas; comfort pits, smokeless chulah, gobar gas plant a ventilated house, passed lanes, different types of drains for rural population, a washing platform, bathroom, a sanitary cow shed a rat proof godown, lance of flies and mosquitoes and their breeding places.

#### Practical field training:

Chlorination of a well, constructing a sanitary latrine, a soakage pit, a compost pit, a smokeless chulah education and motivation to people for the same, disinfection of excreta vomit and fomites of patients suffering from infectious disease.

#### Time schedule:

Theory : Practical : as per schedule of hour allotment. Field visit :

#### C. NUTRITION & NUTRITION EDUCATION

#### **Objectives:**

- 1. To understand the role of nutrition in health.
- 2. To understand the principles of nutrition and the concept of balanced diet.
- 3. To plan and prepare balanced diet for vulnerable groups and special groups.
- 4. To develop skills for preparation and demonstration of nutritious food.
- 5. To identify the factors influencing the nutritional status of the people.
- 6. To identify the malnutrition case prevalent in the community.
- 7. To plan, conduct and evaluate nutrition education session in the community.

#### Course content:

#### Unit - 1

1. **Introduction** to the study of nutrition, Definition, relation of nutrition to health relation of other factors of importance to nutritional status and health.

Eg: Infections.

Classification and functions of foods – body building energy yielding and protective foods.

Nutrients – Carbohydrates, proteins, fats, vitamins, minerals; Functions, sources, and daily requirement of each; calorie requirements, water and cellulose.

#### 2. Nutritive value of food stuffs

Cereals	Pulses	Fats & Oils
Vegetables	Milk & Milk Products	Sugar
Fruits	Egg, meat & fish	Condiments,
		Spices
		Beverages

Enriching subsistence diets with locally available foods stuffs.

#### 3. The balanced diet:

Definition, factors to be considered in planning meals, improvements of diets, selection of foods, cultural factors, nutritional requirements for special groups, vulnerable groups, improving maternal nutrition and child nutrition.

Modified diets - liquid, bland, soft, full.

#### 4. Preparation and preservation of foods:

General principles of cooking: Methods of cooking, effects of cooking on nutrients and common foodstuffs preservation of foods – house hold methods. Food hygiene – simple household measures.

#### 5. Cultural factors in nutrition,

Food fads, food habits.

Food adulteration practices injurious to health Nutrition education – principles of imparting nutrition knowledge. Dietary survey

#### 6. Malnutrition:

Malnutrition's, undernutrition, causes, inter-relationship infestations. Deficiency disease in the country including vitamin deficiencies. Protein energy malnutrition, goitre.

#### NUTRITION EDUCATION

#### 1. Introduction to nutrition education

Factors to be considered in nutrition teaching home economics, cultural practices, dietary habits, availability of foodstuff, rural and urban communities.

Opportunities for nutrition teaching – home clinics, health centre, hospitals, schools, community centres, assessing nutritional educational needs of the community – determining needs of vulnerable groups.

#### 2. Nutrition education for maternal and child health

Identifying areas requiring emphasis eg. Maternal nutrition: Diet in pregnancy: Points to be emphasized.

- Diet for lactating mothers points to be emphasized.
- Common nutritional deficiencies in women, improving diet, prevention and treatment of anaemia.

#### **Child Nutrition**

- Breast feeding
- Introduction of semi solids and solids.
- Feeding schedules
- Preparing food for infants and children.
- Dietary requirements, infancy pre-school place, school phase school health nutrition.
- Nutritional deficiencies in children improving diet, prevention and treatment of common nutritional deficiencies protecting child from infection, non-nutritional measures.

#### 3. Nutrition education - methods and media

Discussions, meetings, individual guidance family health education.

Cooking demonstration, feeding programmes, exhibitions, model Selection and use of appropriate visual aids; kitchen gardens. preparation of low cost aids for nutrition education factors to be considered.

# 4. Nutrition education and family health

Understanding the educational component of the applied nutrition programmes - teaching community to produce and grow more food, teaching community to consume protective foods, Health Workers role in strengthening the applied nutrition programme, Kitchen gardens, poultry keeping for family health.

Food adulteration practices: teaching single techniques to detect adulteration practice, knowledge of adulteration practices harmful to health. Implications and action to be taken by individuals, family and community selection of foods - from locally available resources within purchasing power.

Methods of cooking – preservation of nutrients.

Hygienic practices in handling food and preservation of food.

#### 5. Nutrition education and diet therapy

Nutrition education for chronic illness, care of the sick and specific diseases.

Dietary modification. Blend diet, liquid diet, soft or semi splid diet light diet.

Dietary modifications in diabetes, peptic ulcer, renal hypertension, heart diseases. Assisting and guiding family in selection and preparation of foods for members with special dietary needs.

#### Time schedule:

Theory :
Practical : as per schedule of hour allotment.
Field visit :

#### **Practical:**

Balanced diet

Food adulteration

Identification of malnutrition cases

Diet survey

#### Field visits and observation visits

Individual contact

Group discussion.

Demonstration, Exhibition

Visit to NRC Madurai

Visit to children's Hospital - Chennai

Visit to TINP, ICDS, Chief Minister's Noon Meal Centre.

# **Teaching Aids:**

Charts - Sources of carbohydrates, protein fats, vitamins and minerals. PFM, Vitamin A deficiency diseases, and other deficiency diseases.

Charts from CARC - 13

Charts from TINP

Filmstrips – Our food – 2

Nutrition for Infants - 1

Nutrition for mothers - 1

Slides - Deficiency diseases WHO, UNICEF, GIRH & FWT

#### **Demonstration materials:**

Store, Saucepan with lid, Deep frying pan, Shallow frying pan or Thawa. Dosai Karandi, Iddli Cooker, Saucepan without handle, water can, Spoon (Teaspoon, Table spoon) ladles measuring cups and spoons, perforated ladle, Chapathi Board and pin, Stove, pressure cooker.

# PAPER III

#### A. INTRODUCTION OF PUBLIC HEALTH

# **Objectives:**

To be able to:

- 1. Acquire knowledge and skills related to the performance of health care activities in the community.
- 2. Understand the concept of public health and develop skills to undertake public health activities.

#### Course content:

1. **Concept of public health,** health problems and responsibilities of health workers. Ethics and behaviour of health workers, The health team.

#### 2. Public Health Services

Principles of organizing care in the home, health agencies, clinics, schools, hospitals.

Principles of organizing care according to needs of the patient

- Seriously ill, chronically ill, moderately ill, terminally ill Principles of organizing care according to patient groups
  - age groups children and adolescents
  - adults and the elderly
  - health or medical problems, e.g. patient with fever
  - unconsciousness
  - patients for surgery

# 3. Central State and local arrangements

Public health budget

# 4. Public Health Administration (40 Hours)

(a) Public Health – Previncial – The Ministry of Health – The Director of Public Health and his staff – The Director of Medical Services – The Public Health and Medical Departments – Relationship between the two – Relation to other departments, Revenue, Agriculture, Animal Husbandry, Engineering, Education etc. – Responsibility of the State and various local bodies in matter of Public

Health – Local bodies – Corporations, Municipalities, Town Panchayats, Panchayat Unions, Village Panchayats – their responsibilities – Financial obligation – Public Health staff in these areas – their duties – Health education – different methods and values – Dominion responsibility in Public Health – Port Quarantine – International Health regulations.

# (b) Health Units.

**(c) Public Health Administration** – Details, organization, duties and powers – authority for such powers, public health laws, rules and bye-laws, and procedure in respect of – water – supply, food control housing, building, construction, town-planning, cinemas, tenement, lodging houses, over-crowding, cleansing-epidemic control, camp sanitation (Fairs and festivals)

# (d) Public health laboratories

#### Time schedule:

Theory :

Practical

as per schedule of hour allotment. Field visit

#### B. PUBLIC HEALTH & PUBLIC HEALTH RELATED ACT

# **Objectives:**

To be able to:

- 1. Acquire knowledge and skills related to the public health Act.
- 2. Understand the concept of implementation of the Act.

#### Course content:

# Tamil Nadu Public Health Act 1939

-Introduction

Water Supply

-Local authority to Provide portable water

Power of Government to direct local authority to execute water works

# Drainage

- -Local authority to maintain public
- power of Health officer to require drains to be constructed.
- -Drains in Private streets
- -Drainage of huts

# **Sanitary Conveniences**

- -Obligation of Local authority to provide Public sanitary conveniences
- -New house to be provided with sanitary conveniences

#### **Abatement of Nuisances**

- -Certain things to be nuisances
- Detection of nuisance
- -Information regarding nuisance
- -Power of Health Officer to abate nuisance

#### **Prevention Notification and Treatment of diseases**

- -Information regarding nuisance
- \_ power of Health Officer to abate nuisance

#### **Notified infectious diseases**

Notified diseases

Occupation of houses to prevent the spread of infection.

- -Information regarding notified disease.
- -Power of entry of local officers to take preventive measures
- -Destruction of rats, mice, etc.

# **Maternity and Child Welfare**

-Local authority to carry out Maternity and child Welfare measure

# **Mosquito Control**

- -Prohibition of mosquito breeding in collection of water.
- -Treatment of mosquito breed in places
- -Health Officer's powers in case of default.
- -Protection of anti mosquito works.

# Sanitation and Buildings

- -Residential Areas
- -Notification of residential areas.
- -Approval, appeal, consequences of notification

# Control over unsanitary building

- -New building not be erected on certain sites.
- -Cleansing of court yard or passage used in common

# Abatement of overcrowding

- -Definition
- -Duties of land lord
- -Power to make rules

# Lodging hoses

- -Register of Loading houses
- -Conditions of registration and of renewal of registration
- -Appeal to local authority
- Cancellation of registration by court

#### Food Control

- -Prohibition of sale of food without license in certain places
- -Inspection of dairy by Health officer

#### Fairs and festivals

- -Notification of fairs and festivals by Government
- -Levy of tolls on vehicles
- -Notice to be given of fair or festival
- -Sanitary arrangements etc.
- -Power to enter and seize unwholesome food

# PUBLIC HEALTH RELATED ACTS /RULES (STATE, CENTRAL AND INTERNATIONAL)

#### 1. States

- 1. The Tamil Nadu Public Health Act, 1939(Tamil Nadu Act III of 1939) and the rules made there under.
- 2. The Tamil Nadu Registration of Births and Deaths Rules 2000.
- 3. The Tamil Nadu Places of Public Resort Act, 1888 (Tamil Nadu Act II of 1888).
- 4. The Tamil Nadu Places of Public Resort Rules.
- 5. The Tamil Nadu Cinema (Regulation) Rules 1957.
- 6. The Tamil Nadu Factories Rules 1950.

- 7. The Tamil Nadu District Municipalities Act 1920 (Tamil Nadu Act V of 1920) and the rules made there under (Chapter VII to XII)
- 8. The Tamil Nadu Panchayats Act 1994 (Tamil Nadu Act XXI of 1994) and the rules made there under.
- 9. The Tamil Nadu Town Nuisance Act 1889 (Tamil Nadu Act III of 1889).
- 10. The Tamil Nadu Educational Rules.
- 11. The Tamil Nadu Public Building (Licensing) Act 1965 (Tamil Nadu Act 13 of 1965).
- 12. The Tamil Nadu Public Building Rules 1966.
- 13. Respective Corporation Acts (Chennai & other 11 Corporations)

# 2. Central

- a. The Registration of Births and Deaths Act, 1969 (Central Act 18 of 1969)
- b. The Factories Act 1948 (Central Act 63 of 1948)
- c. The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce Production Supply and Distribution) Act 2003 (Central Act 34 of 2003) and the Rules made their under.
- d. The Cigarettes and Other Tobacco Products (Packing and Labeling) Rules 2008.
- e. The Prohibition on sale of Cigarettes and other Tobacco Products around Educational Institutions Rules 2004.
- f. The Prohibition of Smoking in Public Places Rules 2008.
- g. Rules under the Environment (Protection) Act 1986 (Central Act 29 of 1986) framed rules under section 3, 6 & 25.
- h. The Municipal Solid Wastes (Management and Handling) Rules 2000.
- i. The Bio Medical Waste (Management and Handling) Rules 2000.
- j. The Plastic Waste (Management and Handling) Rules 2011.
- k. Legal Procedures: Power of Entry Inspection Investigation (examination) Procedures Nature of Inspection and frequency of Inspection Preparation of notices service of notices power of arrest compounding of offences appeal procedures cognizance of

offence – Criminal Proceeding procedures – filling of charge sheets in the court and attending proceedings.

#### 3. International

- a. International Health Regulations 2005
- b. Port Health Rules 1955.
- **4.** i) The existing institutions should have the existing syllabus as on date
  - ii) The new institution to be started should have the new syllabus after issue of the G.O.

# Time schedule:

Theory :
Practical : as per schedule of hour allotment.
Field visit :

# C. PUBLIC HEALTH PROBLEMS IN INDIA WITH SPECIAL REFERRENCE TO TAMILNADU

# **Objectives:**

To be able to:

- 1. Gain knowledge about various public health problems with reference to Tamilnadu.
- 2. To know the common diseases prevalent in Tamilnadu
- 3. To acquire knowledge about the different agencies involved in Prevention and control of these diseases.

#### **Course content:**

Health Problems of India -in General

Health Problems related to Tamil Nadu

-Communicable disease problems (i.e.,) Malaria, HIV/AIDS, Tb,

Leprosy,

Diarrhoeal diseases

- NCD
- -Nutritional Problems

- Environmental Sanitation problem
- -Medical Care Problems

-population Problem

Health problems affecting Socio- etc.

-The Role of Health Worker in the health Problems of the people

# Organisation

Organisation of public Health at State, District, Block and PHCs, HSC, Corporation

- -Municipalities, urban health post and their health services
- -Role of private hospitals, NGO, etc.
- -Role of National and International agencies

#### Time schedule:

Theory :
Practical : as per schedule of hour allotment.
Field visit :

# D. FACTORS AFFECTING HEALTH OF THE INDIVIDUAL FAMILY AND COMMUNITY

# **Objectives:**

To be able to:

- 1. Gain knowledge of factors affecting the health of the individual, family and the community including factors affecting the health of the mother and child.
- 2. Acquire knowledge about normal growth and development of the child and utilize this for promotion and maintenance of child health.

#### Course content

1. General factors

Climate

Environmental factors affecting health

Water supply

Personal hygiene and cleanliness

2. Factors affecting the health of the mother and child. Special factors affecting the health of the mother and child

Role of immunization

Growth and development of child

Factors affecting growth and development-prenatal factors, maternal nutrition, hereditary factors, environmental factors socio economic conditions. Stages of child's life-infancy, pre-school, childhood and adolescence, basic needs; assessing priorities; teaching mothers about needs and priorities; developmental tasks.

Assessment of growth and development – weight, height in relation to normal growth curves; milestones of psychomotor development-movements, talking, sitting, standing, walking, teething, examination of the child.

# 3. Nutritional requirements

Pre-school children feeding- requirement for growth; calories and nutrients; assessing nutritional value and improving diet. Feeding of infants, pre-school children and school-going children to prevent deficiency diseases-rickets, marasmus, kwashiorkor, anaemia, vitamin A deficiency, B complex deficiency.

#### 4. Protection of child's health

Prevention and treatment of common childhood diseases and ailments:

Common cold, cough	Pneumonias skin	Eye and ear infection
measles	infection	chickenpox
		Dehydration
Diarrhoea, vomiting	Whooping cough	Tetanus
mumps indigestion	constipation	Worm infection
	mal-nutrition	

Infant mortality-causes, prevention, current rate prevention of accidents-at home, on the roads, in school; common childhood accidents and first aid measures-burns, scalds, foreign bodies in ear, nose and throat, stomach poisoning suffocation.

# 5. Social and preventive aspects

Environmental health hazards; heredity Agencies for child care and welfare-child guidance clinics; school health services; school feeding programme; schools for handicapped children; rehabilitation centres for disabled and handicapped children; legal provisions for protection of children. Improving child health care services role of health workers, family and community; working with other members of the health team.

# 6. Social and preventive aspects

Environmental health hazards; heredity Agencies for child care and welfare-child guidance clinics; school health services; school feeding programme; schools for handicapped children; rehabilitation centres for disabled and handicapped children; legal provisions for protection of children. Improving child health care services role of health workers, family and community; working with other members of the health team.

#### Time schedule:

Theory

111001

Practical

> as per schedule of hour allotment.

Field visit :

#### E.INTERNATIONAL HEALTH REGULATIONS

Definition – Purpose and scope – Principle and Responsible Authorities – Public Health Response – Point of entry – Public Health measures on arrival and departure – Special provisions for Travelers, Goods, Containers and Container loading areas – charges for Health measures regarding travelers – Health Documents - Emergency Committee – Capacity requirements pertaining to conveyance and conveyance operators – Special measures for Vector Control – Vaccination, Prophylaxis and related certificate – Requirement concerning Vaccinator or prophylaxis for specific disease – Surveillance activities on the part of State / Union Territories and Districts.

# F. NATIONAL HEALTH PROGRAMME INCLUDING HIV/AIDS,NRHM

# **Objectives**

To be able to:

- 1. Understand the various national health programmes and identify the nature and magnitude of the problems regarding the implementation of health programmes.
- 2. Identify the educational components in various national health programmes in order to organize health education programmes.

#### **Course Content:**

- National health programmes
   Differences between control and eradication programmes.
- National Malaria Eradication Programme
   Aims strategy, plan of operation, methods, achievements shortfalls
   reasons thereof and of recurrence, special importance of surveillance
   and epidemiological investigation, measures to improve performance,
   role of health education.
- 3. National Leprosy Control Programme
  Needs, Strategy, plan of operation, methods, achievements and
  shortfalls, reasons thereof, place of health education
- National Tuberculosis Control Programme
   Needs, strategy, district control programme, T.B. Clinics BCG immunization, role of health education.
- 5. National Filariasis Control Programme
  Needs, Strategy, plan of operation, achievements, shortfalls, place of
  health education.
- Cholera Control Programme
   Needs, strategy, plan of operation, achievements, shortfalls, place of health education.
- STD Control Programme
   Needs strategy, social factors, role of health education.
- 8. Trachoma Control Programme

  Needs strategy, methods, role of health education.

# 9. Goitre Control Programme

Needs strategy, methods, role of health education.

10. National blindness control programe

Needs strategy, methods, role of health education.

- 11. Special school health programme
- 12. Non communicable disease control programme
- 13. National deafness control programme
- 14. National AIDS Control programme
- 15. National Rural Health Mission

# Time schedule:

Theory :
Practical : as per schedule of hour allotment.
Field visit :

#### PAPER IV

# A.CONTROLE OF COMMUNICABLE DISEASES & NON COMMUNICABLE DISEASE

# **Objectives**

To be able to:

- 1. Acquire an understanding of major communicable diseases and its implications for protection and restoration of health.
- 2. Gain knowledge of practices and techniques related to prevention and control of communicable diseases.

#### **Course content**

1. Introduction to communicable diseases

Terminology; prevalence of communicable diseases

Modes of disease transmission; general measures for prevention and control of communicable diseases-

- controlling source of infection
- blocking channels of transmission
- Protection of susceptible

Understanding role of Health worker, Family, Community, individual and public health authorities in relation to specific measures-notification, isolation and quarantine, disinfection and education of public; vector control.

2. Immunity and Immunization

Purpose, types, effects

National immunization schedule for prevention of major communicable diseases-BCG, Polio, Measles and typhoid vaccines.

Immunization reactions-precautions to be taken; use safe techniques and sterile equipment; testing for sensitivity reactions; emergency treatment for anaphylactic shock; methods of immunization and related technique.

3. Care and treatment of patient with infection

Recognition of signs and symptoms-common signs and symptoms of infection-fever, pulse changes, urinary signs, respiratory changes, gastrointestinal signs and symptoms.

Principles of care and treatment-rest, diet, fluids, hygienic care; medications and treatment; observation of patients; measures for prevention of spread of infections.

Home care of sick patient-individual articles for hygienic care, food and fluids, hand washing facilities; protection of clothes, safe disposal of excreta; safe handling of equipment and supplies.

#### 4. Disinfection and sterilization

Disinfection, disinfectants, sterilization, antiseptics, deodorants, detergents.

Natural agents-physical agents, chemical agents

Effective disinfection by liquid chemical agents halogens, coal tar disinfectants, detergents, oxidizing agents, heavy metals miscellaneous agents; techniques; precautions. Effective disinfection by solid chemical agents-bleaching powder, lime, other disinfectants; techniques; precautions. Effective disinfection by gaseous agents-formalin.

Disinfection water, excreta.

Health teaching aspects.

5. Specific communicable diseases and infections symptoms, mode of spread, prevention and control, incubation period, prevention and control, incubation period, care in specific communicable diseases and infections –

S.No.	Diseases	S.No.	Diseases
1.	Malaria	11.	Poliomyelitis
2.	Filariasis	12.	Smallpox
3.	Dengue	13.	chickenpox
4.	Kala azar	14.	Measles
5.	Tuberculosis	15.	Mumps
6.	Leprosy	16.	Diphtheria
7.	Typhoid	17.	Pertusis
8.	Cholera	18.	Tetanus
9.	Infectious hepatitis	19.	Influenza
10.	Dysenteries	20.	Encephalitis

S.No.	Diseases	S.No.	Diseases
21.	Acute gastro-enteritis	26.	Rabies
22.	Amoebiasis	27.	Conjunctivitis
23.	Worm infestation-hook worm, roundworm, threadworm.	28.	Plague
24.	Other gastro-intestinal infections.	29.	Trachoma
25.	Gonorrhea	30.	Syphilis

To control and Preventive Measures for Emerging and Re emerging Diseases (Like Swine Flu and Ebola Viral Diseases )

# NON COMMUNICABLE DISEASE

# **Objectives**

To be able to:

- 1. Acquire an understanding of major Non communicable Disease and its implication for protection and restoration of health.
- 2. Gain Knowledge of practices and techniques related to prevention and control of Non -communicable diseases.

#### **Course Content**

Introduction of Non-Communicable diseases

- a) Obesity
- b) Hypertension
- c) Diabetes mellitus
- d) Coronary artery disorder
- e) Carcinoma of cervix
- f) Carcinoma of breast
- g) Oral Cancer

- 3. To know about Signs and symptoms of Non communicable disorder
- 4. To know about Prevalence of Non communicable disorder
- 5. To know about Primordial prevention of Non communicable disorder
- 6. To know about Care and Treatment of Patient

# Time schedule:

Theory :
Practical : as per schedule of hour allotment.
Field visit :

# B. BASIC MEDICINE AND TREATMENT OF MINOR AILMENTS

# **Objectives**

To be able to:

- 1. Develop the ability to recognize and treat minor ailments
- 2. Acquire sufficient knowledge of signs and symptoms and diseases of a common, recurrent type of diseases and to provide elemental medical care and take appropriate action.
- 3. Acquire knowledge of drugs commonly used for treatment of minor ailments.
- 4. Develop the ability to recognize adverse effects of drugs in common use and take appropriate action.

# Course content

1. Introduction

Principles of medical care and treatment of minor ailments.

Role and function of the Health Workers in the Health system

Resources available for treatment and minor ailments coordination – understanding referral system, sacking guidance and learning opportunities.

2. Home Nursing and elementary medical care preparing the sack unit/room at home.

Hygienic of the patients/bath elimination, feeding, acuity comfort measures, change of position, rest, recreation, observation of the patient – temperature, pulse, respiration skin, elimination, infernal condition.

Medication and simple treatment

Teaching family members to assist in case of the sick and to take home nursing responsibilities.

First aid kit for the home, equipment and supplies for home care, improvisations.

# 3. Treatment of minor ailments

- a. Examination of the patient methods of examination, take history of the patient, specific complaints and problems. Recognizing signs and symptoms, detecting minor ailments and providing treatment and care, recognition of signs of danger. Complications, signs of serious illness, appropriate action to be taken for serious emergencies and critical illness.
- b. Conditions affecting the skin signs symptom of treatment.

1.	Itching	9.	Boils
2.	Rashes	10.	Impetigo
3.	Patches	11.	Frostbite
4.	Swelling	12.	Lice
5.	Scabies	13.	Ulcer
6.	Pallor	14.	Burns
7.	Wounds	15.	Bites
8.	Bugs		

4. Conditions affecting the ear, and eye – signs symptoms and treatment

1.	Earache	7.	Eye injuries
2.	Discharging ear	8.	Foreign body in ear, eye
3.	Jaundice eyes	9.	Sore eyes
4.	Blurred vision	10.	Trachoma
5.	Dry eyes	11.	Watering eyes
6.	Red eyes (inflamed)		

5. Condit	ions affecting the skeleton	signs, symptoms and treatment
1.	Joint Pains	4. Dislocation
2.	Swelling of joints	5. fractures
3.	Sprains	
6 0 1111	60	
	-	ry system – signs and symptoms and
treatment		
	1. Nose bleeding	2000
	<ul><li>2. Foreign body in the r.</li><li>3. Sore throat</li></ul>	iose
	4. Bronchitis in children	2
	5. Common cold	.1
	6. Cough and fever	
	7. Prolonged cough with	n blood in sputum
	8. Chest injuries	i blood iii spataiii
	9. Chest pains	
	10. Shortness of breath	
	11. Asphyxia	
	12. Tonsillitis	
7. Conditi		system – sings, symptoms of treatment.
	1. Diarrhoea mild sever	
	2. Indigestion	
	3. Stomach ache	
	4. Jaundice	
	5. Worms – hook worm,	round worm, thread worm.
	6. Abdominal pain	
	7. Abdominal distension	ı
	8. Abdominal injuries	
	9. Constipation	
	10. Blood in stool	
	11. Sores in the mouth	
	12. Gum bleeding	
	13. Tooth ache.	

1. Maturation	2. Renal colic		
- frequency			
- painful retention of urine	3. Incontinence		
9. Conditions affecting the Neurom	uscular system - signs, symptoms and		
treatment.			
1. temperature regulation	4. Back ache		
2. Head ache	5. Heat stroke		
- occasional	6. heat exhaustion		
- persistent	7. convulsion		
- service	8. Paralysis		
3. fever	9. unconsciousness		
- mild	10.head injuries		
- moderate			
- high			
10. Condition affecting the reproduc	tive system - sign symptoms and		
treatment.			
1. Sores on the genital area	6. Prolapsed		
2. Urethral discharge	7. breast abscess		
3. vaginal discharge	8. breast lump		
4. abnormal menstruation			
5. painful menstruation			
11. Basic Medical care			
Ailments in children basic me	dical of nursing care in common		
disorder of			
- cardiovascular system			
- respiratory system			
- digestive system			
- urinary system			
- skeletal system			
- neuromuscular system			

8. Conditions affecting the urinary system signs symptoms and treatment.

# 12. Pharmacology

Introduction to study of pharmacology, sources of drug legislation, preparation of drugs solutions and suspensions, capsules, tablets pills, powders, treatments, ailments, pastes, plasters, suppositories, dangers of misuse and indiscriminate use of drugs

Abbreviations in common use, prescription and orders for medications.

Action of drugs - local action, systemic action, factors that influence action route of administration care of drugs, qualities and regulations regarding administration of medicines, role of the health worker.

Classification and action of groups of drugs.

1. Analgesics 11. Helmentics

2. Anesthetics 12. Hormones

3. Anticoagulants 13. Laxatives

4. Anti emetics 14. Sedatives

15. Stimulants 5. Anti-infections

6. Antipyretics 16. Vitamins

7. Antiseptic

8. Depressants

9. Disinfectant

10. **Diuretics** 

# Time schedule:

Theory

Practical : as per schedule of hour allotment.

Field visit :

# C. FIRST AID, EMERGENCY CARE AND

#### REHABILITATION

# **Objectives:**

To be able to:

1. Acquire knowledge and skills to render first aid in accidents and emergencies.

# **Course Content:**

1. Introduction

Scope of fist aid; principles of emergency care management of emergency situations – care of causality Screening and sorting procedures – mass casualties Principles of first aid treatment for hemorrhage, asphyxia and fractures.

2. Promoting safety consciousness

Safety in the home

Safety measures in the school, playgrounds, streets, institutions.

Safety on the job-farm and factory

Prevention of accidents – common sense measures and observation of few simple rules.

3. Injuries to bones, joints

First aid measures for injuries to upper extremities

First aid measures for injuries to lower extremities

First aid measures for injuries to skull, rib injuries, injury to pelvis.

First aid measures for spinal injuries, multiple fractures, crush injuries.

4. First aid in wounds and haemorrhage

Wounds-types principles of wound care, immediate care,

Hemorrhage – types control of bleeding, pressure points,

Bleeding from special regions and cavities-Nose, stomach, lungs, kidney, bowel, gums,

Ear, internal bleeding.

5. First aid in poisons, bites and stings, foreign bodies

Swallowed poisons Snake bite Foreign bodies in

Inhaled poisons Dog bite - eye

Injected poisons Rabies - ear, nose, throat

Insect bites - stomach

and stings

6. First aid in unconsciousness

Loss of consciousness

Health stroke

Fainting

Stupor

Coma

Convulsions

Hysteria

Asphyxia - drowning, strangulation, choking

- causes, types, signs and symptoms

- artificial respiration.

7. Thermal electrical and chemical injuries

Burns and scalds-first aid treatment for critical burns;

Burns caused by strong acids, alkalis; moderate burns;

Minor burns and scalds.

8. Emergency care / disasters and first aid

Types of disasters; Health Workers responsibilities; aspects of disaster relief work.

Principles of preserving life and health in emergencies.

Teaching self aid procedures to community for safety of water supply food safe disposal of waste, health protection measures including immunization, management of emergency childbirth.

9. First aid procedures, supplies and equipment

Application of bandages, slings, dressings, splints.

Transport of casualty, stretchers, lifting and carrying injured persons, blanket lift and other improvisations.

First aid supplies, first aid kit.

#### Management of Hemorrhages 10.

Pressure points, constructive bandage

Management of fractures

Dressing-bandages and slings

Transport of causality, lifting of causality

Cradle-pulmonary resuscitations

Suggestions

# Time schedule:

Theory :

Practical : as per schedule of hour allotment.

Field visit :

#### PAPER - V

# A.HEALTH AND VITAL STATISTICS, HMIS, MAINTANANCE OF RECORDS

# **Objectives**:

To be able to:

- 1. Acquire knowledge and skills in the use of simple statistics as they apply to health.
- 2. Contribute to the development of a satisfactory system of maintaining vital and health statistics.

# **Course Content:**

# 1. Introduction

Statistics, vital statistics, health statistics, sources of vital and health statistics – census; registration of births, deaths and marriages; notification of infectious diseases; records of health centre and hospital; health surveys.

Uses of statistics in community health-illustrations regarding use of statistics.

Definitions-rates; ration; frequency distribution; arithmetic mean and the range.

Calculations

Collection of statistical date – factors to be considered. Role of Health Workers in participating in date collection procedures.

#### 2. Health and vital statistics

Definition and uses of-birth rate, death rate, specific rate, maternal morbidity rate, infant mortality rate, neonatal mortality rate, perinatal mortality rate, expectation of life at birth, prevalence rate, incidence rate, general fertility rate.

Measurements affecting health—nutrition data, housing data, data on social, economic and environmental factors.

Measurements related to services-preventive services, promotive services and curative services.

Graphic representation of date; diagrammatic representation of data

3. Vital statistics registration procedures

Existing system of registration; defects in the present system.

Registration Act; birth and death certificates

Specific methods to improve the system of registration of vital

Role of Health workers in maintaining complete records of vital events.

Interpretation and use of statistical information.

#### Time schedule:

Theory

Practical : > as per schedule of hour allotment.

Field visit :

# B. REPRODUCTIVE AND CHILD HEALTH / NRHM

# objectives:

- 1. To understand the concept and components of MCH Programme.
- 2. To understand the factors influencing the maternal and child morbidity and mortality and utilize this knowledge for improving MCH services.
- 3. To understand the existing services for maternal and child care.
- 4. To identify the role of health workers male in the integration of MCH, Nutrition and family planning programme.
- 5. To coordinate with the female health worker in implementing the Universal immunization programme.

# **Course content:**

1. Principles of maternal care

Prenatal; Intranatal; Postnatal

2. Maternal health factors

Socio-economic factors effecting maternal health – literacy, economic status, cultural practices, beliefs, customs, nutrition and food habits

Assessment of maternal health problems in a community maternal mortality and morbidity.

3. Organisation of MCH Services -

Rural and urban services. MCH Services in the home clinics, health centres and hospitals. Health workers responsibilities in MCH services. Role of dais/traditional birth attendants, working with dais, Integration of nutrition, family planning immunization, child care and maternal child health services

# Field visits:

Visit to sub-centre

Identification of High risk cases

House visits

# **Observation visits:**

- 1. Antenatal clinics
- 2. Well-baby clinics
- 3. Post-natal clinics

# **Teaching Aids:**

# Charts:

- 1. Mile stones
- 2. Foetal development different stages
- 3. Road to health cards.
- 4. Immunisation schedule.

# Filmstrips:

- 1. Birth of a baby.
- 2. Care of infants
- 3. Feeding of infants and children.

#### Time schedule:

Theory : Practical : as per schedule of hour allotment.

Field visit :

#### C. FAMILY WELFARE INCLUDING POPULATION EDUCATION.

# objectives:

- 1. To understand the objectives and operational goals of the national family planning programme and the role of Health Worker (M)
- 2. To lie the methods of contraception.
- 3. To identify the services available for family welfare.
- 4. To identify and motivate the eligible couples for Family Planning Adoption.

#### course content:

- 1. Family Planning Methods:
  - Natural, chemical, mechanical, surgical, normal methods foam tablets, intra-uterine devices, O.P, sterilization.
  - Physiology of contraception
  - M.T.P.
  - Re -anastomosis.

# 2. Concept of F.W. Services:

- Importance of Family Planning and Welfare Health and socioeconomic factors; Mortality rates of vulnerable groups.
- Human reproduction
- Population dynamics.
- Aspects of family health and welfare services
  - (i) Maternal health, child health services, family health care;
  - (ii) Marriage guidance, premarital education.
  - (iii) Home economics and nutrition.
  - (iv) Spacing of birth, limiting births.
  - (v) Treatment of infertility.

# 3. National Family Planning Programme:

- Goals, policies, education programme
- Organisation and set up of family welfare services at central, state,
   district, PHC and sub centre level.

- Role of Health Worker (M), Special duties of Health Worker (M) role of other members of the health team Co-ordinating efforts to provide effective services.
- Role a voluntary organizations in providing Family Welfare Services.

# 4. Organisation of Family Welfare work:

Surveying the community for Eligible Couples, case findings, techniques of reaching the community, working through local organization and community leaders.

Promoting the small family norm, health benefit of small family; healing people to accept and adopt family planning methods; importing family planning facts; dealing with mis-conceptions.

Planning and organizing and family planning services:

Home clinic community, vasectomy devices, vasectomy camps, distribution system for commercial contraceptives. Extension education, records and reports, family planning campaigns, OTC for Family Welfare leaders. Population education for in school and out of school groups.

- 1. Field visit observation to observe family welfare service
  - District
  - PHC, HSC
  - Postpartum centre PHC & S.C. for FW
- 2. Practical in the field:
  - E.C. Survey
  - Identification leaders and Local organized groups
  - Conducting VLT
  - Conducting educational
     Session, Exhibition
- 3. Class room practical:
  - E.C. Survey analysis
  - List of leaders

# **TEACHING FOR NUTRITION, FAMILY PLANNING AND MCH**:

- 1. Filmstrips an identification of village leader.
- 2. Filmstrips an identification of training of village leaders.
- 3. Filmstrips an integration of MCH & FP.
- 4. Filmstrips on conception an contraception.
- 5. Charts on vasectomy, tubectomy.

# Time schedule:

Theory :
Practical : as per schedule of hour allotment.
Field visit :

#### PAPER VI

#### A. BEHAVIOURAL SCIENCE

# objectives:

To be able to:

- 1. Gain knowledge of elementary principles of psychology for an understanding of personal, individual and group behaviour.
- 2. Develop interpersonal skills required for
  - (a) carrying out health care activities; and
  - (b) functioning effectively as a member of the health team.
- 3. Motivate individuals and groups to improve health care practices and utilize health and welfare services.
- 4. Acquire knowledge of basic sociological principles and process as they relate
  - to the individual family and community.
- 5. Gain an understanding of the social factors that affect the community's health, welfare and life.

# a) Psychology:

- 1. Factors influencing human behaviour
  - Heredity and environment

Basic needs, drives, urges

Early learning, value systems, attitudes,

Beliefs, norms, perception, religion, education,

Economic status, social status, personality, self

Concept, body and mind relationships, intellectual

Development.

2. Life stages and behavioural patterns

Behavioural patterns in childhood

Behavioural patterns in adolescence

Behavioural patterns in adults

Behavioural patterns in the aged.

3. Emotion and behaviour

Meaning and importance of emotions

Emotions-expression and control; positive and negative emotions

Emotion and health; specific emotions and fear, anger,

Love, jealousy, stress, illness and behaviour.

 Defence mechanisms and behaviour Purpose of defence mechanisms
 Common defence mechanisms

Common defence mechanisms

Adjustment; conflict; frustrations

- 5. Social behaviour and interpersonal relations Acceptance of the individual; individual differences, appreciation, recognition, approval in social relations. Group standards and conformity; behaviour adoptations, Maintaining effective relationships; self understanding.
- 6. Learning, motivation and change in behaviour Motives; incentives; goals and aspiration. The process of Motivations; significance of motivation in improving Health practices; changing attitudes and habits; Motivating individuals and groups to improve health Practice. Conditions of learning; Methods of learning.

# 7. The community

- (a) <u>Rural Community</u>: Characteristics; changes in the village; community development; major rural problems; community organization structure functions, communication channels, social institutions, Panchayats, co-operatives, power structure, leadership patterns in the community, identification, training and utilization of leaders.
- (b) Social groups: Groups primary and secondary; in groups and out groups structure; activities of groups; organization of groups. Urban and rural administrative pattern panchayats and corporations; crowd, public audience.
- (c) Rural-urban continue:

#### 8. Social Process

Co-operation, competition, conflict, assimilation, adjustment, The individual and process of socialization community health services and social process; change and development in the community.

#### 9. Social controls:

Traditions and customs; folkways and mores, laws; traditions and habits affecting health; social problem; anti social practices.

# 10. Social stratification

Caste, mobility; status; regionalism

(i) Marriage and family

Marriage pattern

- (a) The join family; the nuclear family, modern family, family welfare services. Factors affecting mode of living.
- (b) The family as an integral unit of health services. The family as the focus of health workers attention in health and family matters.

Family health as it relates to income illiteracy of members and cultural patterns of the society.

# 12. Family health care:

The family as an integral unit of the health services. The family as the focus of health worker's attention in health and family matters.

Family health as it relates to; income, illiteracy of members, cultural patterns of society.

# 13. Introduction to community health

Understanding the community – characteristics local community organizations, structure, functions, communication lives, panchayats cooperations, corporations, leadership patterns in the community, Health facilities available in the community conventional services (Official) – traditional indigenous services. Factors affecting community health development.

# Time schedule:

Theory :
Practical : as per schedule of hour allotment.
Field visit :

#### For field work:

1. Study the community (KAP Study)

2. Preparation of sociogram

3. Identification of leaders

4. Training of leaders

# **B.COMMUNICATION SKILLS & IPC & COUNSELING**

# objectives:

To be able to:

- 1. Gain knowledge of elementary principles of counseling.
- 2. Develop interpersonal skills required for
  - (a) carrying out counseling for different groups
  - (b) functioning effectively as a member of the health team.

#### Course content

Basic counselling skills

The building relationship

Assessment of suitability of basic counselling

Starting and structuring sessions

**Building** rapport

Listening skills

Showing attention and interest

Asking questions

Monitoring

Managing resistance

Training clients in relaxation

**Ethical Issues** 

#### Time schedule:

Theory :
Practical : as per schedule of hour allotment.
Field visit :

# C. IEC, AV AIDS, MEDIA

# **Objectives:**

To be able to:

- 1. Acquire knowledge of basic communication skills and their application to health work.
- 2. Science and use appropriate audio-visual aids to strengthen teaching activities.

#### **Course content:**

#### 1. Communication

Elements of communication – sender, message, receiver, channels of communication.

Factors influencing communication – factors related to message, sender, receiver, situation, barriers to communication, establishing effective communication, channels for health work; distortions, misinterpretations, traditional and modern channels; types of communication-verbal and non-verbal, formal and informal, two way and one-way fact-to-face communication and mass communication; communication patterns in groups.

Evaluating effects of communication – simple tools and methods; informal techniques.

# 2. Communication skills for health work

Basic skills for communication; human relations skills; listening skills; writing skills; drawing skills.

Communication for health work through-talks; broadcast, role play group discussions, demonstrations, puppet shows plays.

Communication within health team; oral and written reports; accuracy of records and reports; use of language that is effective; concise; communication and learning.

Communication with members of the community approaches, problems.

#### 3. Introduction to audio-visual aids

Audio visual aids in health education programmes classification of audio-visual aids; e.g. graphic aids projected aids, purposes, limitations of audio-visual aids; sources of audio-visual aids-free materials and inexpensive materials.

# 4. Selection and utilization of audio-visual aids

Selecting suitable aids for health work; criteria for selection; audience category, purpose, situation or setting; Health workers, skills, resources and facilities available.

Effective use of audio-visual aids in terms of purpose of educational effect; providing information; creating awareness, developing or canging attitudes; developing skills or abilities; learning how to use audio-visual aids that are commonly available.

# 5. Preparation of audio-visual aids for health work:

Basic skills/competencies-simple drawing, lettering, colouring; preparation and one of low-cost graphic aids and 3 dimensional aider flash cards; bulletin boards low cost models, Khalidoscope, graphs and charts, pamphlets and leaflets, flip charts, picture scroll box roller, blackboard.

Use of slide projector; interpreting message conveyed by mass media; use of traditional vehicles of communication for village health work.

#### Time schedule:

Theory

Practical:

s as per schedule of hour allotment.

Field visit

#### D. HEALTH EDUCATION

# **Objectives**

To be able to:

- 1. Acquire knowledge of the principles and practices of health guidance and education.
- 2. Recognize and utilize opportunities for health education.
- 3. Function effectively for the promotion of the health and family welfare by participating in health education activities.

#### Course content:

#### 1. Introduction:

Aims of health education; scope of health education.

Concept of health education.

Role of Health Workers; identifying health education component of Health Workers; functions;

# 2. Teaching-learning process

Concept of learning, change in behaviour

Characteristics of learner

Steps in the learning process; methods of learning.

Evaluating learning.

Principles of motivation.

Establishment of a favorable teaching-learning situations; understanding factors which promote learning; learning connects with life; relevant learning; learning by doing, participation of learner in the teaching-learning situation.

DIRECTOR OF PUBLIC HEALTH AND PREVENTIVE MEDICINE
AND
CHAIRMAN BOARD OF EXAMINATION
CHENNAI – 6.