

1	Name of Course	<b>C. C. In Health Worker (W.E.F. 2015-16)</b>						
2	Course Code	<b>201203</b>						
3	Max.No.of Students Per Batch	25						
4	Duration	1 year						
5	Type	Part Time						
6	No.Of Days / Week	6 Days						
7	No.Of Hours /Days	4 hrs.						
8	Space Required	1) Class Room = 200 Sq feet 2) Workshop = 200 Sq feet <b>Total = 400 Sq feet</b> 3) Organization should have MOU with 25 Bedded functioning hospital 4) Distance between Hospital and Institute Should not be more than 10 Km.						
9	Minimum Entry Qualification	S.S.C. Pass						
10	Objective Of Course	To prepare a Skillful & well trained Health Worker Assistant						
11	Employment Opportunity	To Assist Qualified person.						
12	Teacher's Qualification	1) Degree in Medical/Public Health 2) Diploma in Nursing 3) BSW(Bachelor of social work)						
13	Training System	<b>Training System Per Week</b>						
		Theory		Practical		Total		
		6 hrs		18 hrs		24 hrs		
14	Exam. System	Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Min. Marks
		1	<b>20120311</b>	BASIC HEALTH SCIENCE & PROGRAMME	TH-I	3 Hrs.	100	35
		2	<b>20120312</b>	I.E.C & NON COMMUNICABLE DISEASES MENTAL HEALTH	TH-II	3 Hrs.	100	35
		3	<b>20120313</b>	NUTRITION & R.C.H.	TH-III	3 Hrs.	100	35
		4	<b>20120321</b>	BASIC HEALTH SCIENCE & PROGRAMME	PR-I	3 Hrs.	100	50
		5	<b>20120322</b>	I.E.C & NON COMMUNICABLE DISEASES MENTAL HEALTH	PR-II	3 Hrs.	100	50
		6	<b>20120323</b>	NUTRITION & R.C.H.	PR-III	3 Hrs.	100	50
				TOTAL			<b>600</b>	<b>255</b>

# **HEALTH WORKER**

## **THEORY - I**

### **BASIC HEALTH SCIENCES AND PROGRAMME**

#### **Section - A.**

##### **1) Anatomy & Physiology**

- a) Circulatory system** - Blood composition, blood cells and plasma, hemoglobin, blood coagulation, bleeding time, blood grouping & grouping and cross matching, heart structure and blood vessels, heart sounds and heart rates; systemic, pulmonary & portal circulation, pulse and blood pressure blood vessels a arterial, venous and capillary system.
- b) Lymphatic system** - Normal lymphatic circulation, lymph nodes, main groups of lymph nodes, function of lymphatic system.
- c) Respiratory system** - Upper and lower respiratory tract; structure and functions of lungs, normal respiration, exchange of gases, capacity of lungs and respiration rate in various age groups.
- d) Digestive system** - The alimentary tract - oral cavity esophagus, stomach, small & large intestines, peristalsis, digestion-mechanical & chemical; salivary gland, liver, pancreas and gall bladder, enzymes, absorption, assimilation & elimination of food.
- e) Excretory system** - Organs, location, structure & function of kidney, ureter, urinary bladder & urethra, composition of urine, urine formation, micturation, water and salt balance.
- f) Endocrine system** - Endocrine glands its location, structure and functions; body temperature regulation.

#### **Human Reproduction :-**

##### **1) Male Reproductive System :-**

External & internal reproductive organs, location, structure & function.  
Spermatogenesis, maturation of spermatozoa, structure of spermatozoa, male harmonies, semen and ejaculation.

##### **2) Female Reproductive System –**

External and internal reproductive organs; location, structure and function, menstrual cycle, female sex hormones, maturation of ovum, embryology, fertilization, conception, pregnancy, foetal development, labour, lactation.  
Secondary sex characteristics of male & female.

#### **Microbiology and Bio-safety**

##### **1) Micro-organisms :-**

- Classification & characteristics of bacteria, viruses, fungi, yeasts, parasites; conditions affecting the growth of micro-organisms.
- 2) Useful micro-organisms in soil, water, food & milk; normal flora of human body,
- 3) Sources of infection, mode of transmission, portal of entry and exist; factors which favour and hinder infection, immunity, immunizing agents, hypersensitivity, antigen-antibody reaction.
- 4) Pathogenic micro organisms transmitted from alimentary tract & respiratory tract through food, food poisoning, blood borne pathogenic micro organisms.
- 5) Collection of specimens for bacteriological examination (sputum, urine, stool, vomitus, body fluid

etc.)

- 6) Methods of destruction and removal of micro organisms : Sterilization, incineration, disinfections & fumigation; Biosafety measures, properties & uses of common disinfectants and antiseptics.

## **Behavioral science**

### **A) Psychology**

#### **1) Factors influencing human behaviour :**

Heredity, environment, basic needs, drives, urges early learning, value systems, attitudes, beliefs, personality, self concept, body - mind relationship.

- 2) Life stages and behavioral patterns; in children, adolescents, adults and the elderly.
- 3) Emotions, behavior and health.

#### **4) Defense mechanism :**

Purpose of defence mechanism, common defense mechanisms.

- 5) Conflict, frustrations, adjustment.
- 6) Social behaviour and interpersonal relations, individual recognition; approval in social relations & adaptation.
- 7) Motivation and change in behaviour; attitude and habits.
- 8) Improving health practices in individuals and groups.

### **B) Sociology**

#### **1) Social groups :**

Primary and secondary groups, activities and organisation of groups.

#### **2) Social processes :**

Co-operation, competition, conflict, assimilation, adjustment.

#### **3) Social controls :**

Tradition, customs, laws, traditional habits affecting health; social problems & anti social practices.

#### **4) Social stratification :**

Caste, mobility, status, religion and regionalism.

#### **5) Marriage and family :**

Marriage patterns, legal implications, importance of marriage, types of family viz – joint nuclear, advantages & disadvantages.

#### **6) Community :**

Characteristics, changes in rural community, urban community : characteristics, changes and adjustment to urban environment, specific health problem.

## **Hygiene**

- 1) Meaning of hygiene, its importance-types-personal, sexual, reproductive, industrial, community etc.
- 2) Factors influencing health and healthful living.
- 3) Hygienic practices vis-a-vis unhygienic practices and impact on health.
- 4) Physical health and personal hygiene : Skin care, care of the hair, prevention of pediculosis, dental - care and oral hygiene, care of face, eyes, nose, throat, hands, nails and hand washing, cleanliness, clothing, menstrual hygiene, foot wear, prevention of postural defects, exercise, yoga, rest, relaxation and sleep. Food values, nutritious diet selection, preparation and handling of food, unhygienic Habits : use of tobacco, smoking, alcoholism, drug addiction, irregular sleeping, irregular bowel movements.
- 5) Determination of hygienic status of individual and community.

## **Section : B**

### **Public Health and Community Health :**

1. Concepts in public health and community health.
2. Public health administration in India, organizational set up in rural & urban area, panchayat raj, district health administration.

3. Concept of health team, health team at primary health centre & subcentre responsibilities of PHC/SC staff, maintenance of supplies, equipment and records : Indenting stock book health records & registers, family health cards, medical records, use of health worker's diary, tour diary and referral.
4. **Family health care :** The family as an integral unit of the health services. The family as the focus of health workers attention in health & family matters.
5. **Introduction to community health :** Understanding the community characteristics. Local community organizations structure, function, communication lines, panchayat, cooperatives, corporations Leadership pattern in the community, health facilities available in the community. Factors affecting community health development.
6. Community development programmes and health activities at block level, social welfare services, tribal development programme, mahila and bal kalyan program.
7. Hospitals and health care, rural hospital, first referral unit, district hospital, specialty hospital, private practice.
8. Indigenous health services,
9. Voluntary health organisations - various agencies in India and their functions.
10. International health organisation like WHO, UNICEF, FAO, UNFPA, DANIDA, USAID, World bank.
11. **Health planning and management :-** Committees on health plans, Five year plans-health sub-sectors in five year plan; implementation of health plans at village, block, district, state and national levels. Planning cycle; management methods.
12. National health policy - need, objectives and goals.
13. Orientation to major national health programmes viz RCH, nutrition, communicable disease, malaria, filaria, tuberculosis, leprosy, blindness control, STD, AIDS, goitre, water supply and sanitation. Role & responsibility of health workers in of national health plans & implentation programmes at village, subcentre & PHC levels.  
Coordination with govt. & non Govt.sectors, local NGOs & community, team work.

## **Factors affecting health of the Individual, family and community.**

1. **Determinants of health :** Heredity, environment, lifestyle, socio-economic conditions, health & family welfare services, other factors like personal hygiene and cleanliness income, illiteracy, customs and beliefs.
2. Responsibility for health - Individual, family, community, state, national / international.
3. **Indicators of health :** Mortality, morbidity, disability rate, nutritional status health care delivery utilisation rates, indicators of social & mental health, environmental indicators, socio economic indicator, health policy, quality of life.
4. **Natural history of diseases :** Pre pathogenesis and pathogenesis phase.
5. **Epidemiological triad :** Agent, host and environment.
6. Present health situation in India.

**Demogrraphic profile, mortality profile, morbidity profile, health care facilities and personnel. Public health problems :** communicable diseases problems, environmental sanitation problems, nutritional problems, medical care problems, health problems related to socio-economic factors - poverty, illiteracy, population problems, health problems in relation to economy and productivity.

## **Primary health care and Health for All by 2000 A.D.,National health policy.**

1. **Evolution of primary health care :-** Historical perspectives, Alma Ata declaration, definition and meaning of primary health care, need, principles & components.
2. **Health for all by 2000 A.D. :-** meaning, goals, national strategy, achievements and failures.

### **Environmental sanitation**

1. Components of environment and their impact on human health. Definition and scope of environmental sanitation, environmental health problems in rural and semi-urban areas; promotion of healthful environment, environmental health hazards.  
Water : Potable water, uses, needs, sources of water, water quality & impurities in water, measures to

improve in sanitary well to sanitary well, hazards of water pollution, biological and chemical, water pollution law - Epidemic act, water borne diseases. Purification of water- On large scale - storage, filtration, chlorination. On small scale - boiling, chemical disinfection, filtration. Disinfection of wells, preservation & use of bleaching powder.

Criteria for water quality - Physical, chemical, bacteriological, water quality standards, protection of water supplies.

Surveillance of water quality - Sanitary survey, collection of water samples for physical, chemical & bacteriological exam. Role of public health lab in water quality monitoring, Horrocks test, swimming pool sanitation, National water supply and sanitation programme.

2. **Excreta disposal** : Public health importance, extent of health problem in India.  
Spread of diseases from pollution by excreta, sanitation barrier. Methods of excreta disposal - various types of latrines, borehole, dugwell, Sulabh shauchalaya, trench latrine. Sanitary latrine - criteria of sanitary latrine, different types of sanitary latrines the hand flush, water seal, pit latrine, septic tank. Social aspect of excreta disposal, organisation of a sanitary latrine programme in rural areas, sewerage system for semi urban areas :
3. **Solid waste disposal** : Health aspects, composition and quality, sources of refuse, storage, collection, methods of disposal-dumping, controlled tipping or sanitary land fill, incineration, composting, manure pit, burial.
4. **Disposal of the dead** : Public health aspect of various methods of disposal of dead bodies, selection of site for cremation or burial, disposal of carcasses.
5. **Disposal of liquid waste** : Public health importance, diseases spread due to improper disposal, various methods of disposal, construction of soakage pits, and kitchen gardening, sewage farming.
6. **Housing and Health** : General principles of healthful housing, sites, orientation, foundation, roofs, damp proofing of structures, ventilation, lighting, sleeping rooms, kitchen, bathroom, drainage, godowns, a sanitary cowshed.
7. **Control of insects, rodents and stray dogs** : Insects as carriers of diseases and diseases transmitted by them. Insects : Life history of house fly, mosquito, bed-bug, tick, mite, flea, lice, mosquito, control measures - personal protection from bites, antilarval measures, anti adult measures, insecticides, biological control, integrated vector control, Rat control, different methods of rat destruction. Control of stray dogs.
8. **Food sanitation** : Food borne diseases, food contamination, mode of spread Preservation of food and milk, Food poisoning (bacterial & chemical).
9. **Sanitation of places of public gathering** : Occasions, stress on existing facilities, breakdown : Diseases likely to spread in places of public gatherings, sanitary measures to be taken in fairs, bazars, markets, worship places and other places of public gatherings.
10. **Minor sanitary engineering** : Different types of drains suitable for rural areas, ( pavement of lanes, bricks, cement, mortar, qualities of bricks, sand) Construction of sanitary well, improvement of old in sanitary wells. Construction of urinals and latrines, soakage pits : Rural housing.
11. **Air pollution** : Air Composition of air, sources, discomfort, air pollution, effect on health, prevention & control of air pollution.
12. **Noise** : Loudness, frequency, effect of noise exposure, noise control.
13. **Temperature and its effect** - Heat stroke, hyperpyrexia, heat exhaustion, heat cramps, effect of cold.
14. **Disposal of Plastic waste** : Environmental hazards, adverse effects on health & their prevention & control - establishing no plastic zones, public education.
15. **Biomedical waste management in Rural hospital/PHC/subcentre** Definition, significance, types, health hazards, sources in rural setting, safe transport and disposal.

## THEORY - II

### I.E.C& NON COMMUNICABLE DISEASES MENTAL HEALTH

### INFORMATION, EDUCATION, COMMUNICATION (IEC), NON COMMUNICABLE DISEASES, OCCUPATIONAL AND MENTAL HEALTH.

#### Section A

#### \* **Information, education, communication (IEC)**

1. **Introduction** : Aims, scope, concept and principles of health education. Responsibilities of Health Workers.
2. **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 distortions, misinterpretation, traditional and modern channels type of communication - verbal and non-verbal, formal and informal, two-way and one-way face-to face communication and mass communication; communication patterns in groups. (Group communication) Inter personal communication, counseling, evaluation of effects of communication-simple tools and methods; informal techniques.

### MENTALHEALTH

#### National health programme

Following national health programmes should be discussed on the following heads - historical aspects, needs, strategy, plan of operation, achievements, shortfalls, measures to improve performance, role of health education control measures with special reference to newer techniques if any, drugs for the treatment of disease, responsibilities of MPWs, compilation and interpretation of record and reports, demonstrative visits should be organised wherever possible.

1. Anti-malaria programme.
2. Revised national tuberculosis control programme.
3. National filariasis control programme.
4. Diarrhoeal diseases control programme.
5. Reproductive tract infection & STC control programme.
6. AIDS control programme.
7. National programme for control of Blindness.
8. National programmes on nutrition.
  - a) Prophylaxis against anemia due to iron deficiency.
  - b) Prophylaxis against blindness due to Vit. A deficiency.
  - c) Mid day meal.
  - d) Integrated child development service scheme (ICDS)
  - e) IDD control programme.
9. Water supply & environmental sanitation.
10. Universal immunisation programme with special reference to PPI
11. Minimum needs programme.
12. Guinea worm eradication programme.
13. Leprosy eradication programme.

## **2. Revised tuberculosis control programme.**

- \* Demonstration - BCG vaccination, Anti T.B. drugs, preparation of sputum slide & Z-N staining.
  - \* Exhibition setting by MPWs.
  - \* Talking points for health education.
  - \* Report and treatment card writing by MPWs.
- Diarrhoeal diseases control programme  
Practical to be done by MPWs - preparation of ORS / chlorination of well water.

## **3. RTI, STD & AIDS control programme.**

- \* Case demonstration, group discussion, field demonstration, slide show.
- \* Counselling technique.
- \* Exercise on syndromic approach and treatment, drugs used.
- \* Role play by MPWs.

## **4. National programme for control of blindness :-**

- \* Field surveys of cataract by MPW, detect cases of cataract, refractory errors.
- \* Case demonstration, follow-up of operated cases. Role play & group discussion by MPWs.
- \* Iodine deficiency disorder control programme.  
To find iodine content in salt, field survey to detect IDD cases.
- \* Leprosy eradication programme.
- \* Practical demonstration on skin clipping, palpation of nerves, testing anesthetic skin patch, testing touch and temperature sensation.
- \* Visits to LCU, leprosy hospital, reconstructive unit, rehabilitation centre.
- \* Demonstration - case demonstration, anti leprosy drugs.
- \* Role play & group discussion by MPWs.
- \* Care of the wounds and body.
- \* Field surveys by MPWs to find out individuals with anaesthetic patch.

## **Section : B Communicable diseases**

1. Communicable diseases - distribution, prevalence, epidemics & endemicity, epidemiological factors agent, host, environment, prevention & control, notification & surveillance, care & treatment of patient, home care of a sick patient.
2. Specific communicable diseases & infections : Extent of problem, epidemiology, sign / Symptoms, mode of spread, prevention & control, incubation period treatment, care in specific communicable diseases and infections, vaccine preventable diseases.
3. Malaria and Tuberculosis  
Filaria, typhoid, rabies, trachoma and skin infection (scabies, ring worm, pediculosis, candidias)  
Dengue, chicken pox, measles, mumps, diphtheria, pertussis, tetanus, influenza, encephalitis, plague, conjunctivitis, syphilis, gonorrhoea, yaws, pinta, guinea worm diseases.  
Polio-myelitis, ARI, infectious hepatitis, scrub hepatitis, other STDs and AIDs, Emerging and re-emerging Diseases.  
Diarrhoeal diseases - cholera, amoebiasis, worm infestation (hook worm, round worm, thread worm, tape worm), other gastrointestinal infestation, food poisoning, travelers diarrhea etc.  
Leprosy - Basic facts, signs and symptoms, clinical features, classification, diagnosis, differential diagnosis, bacteriology, treatment reactions and their management, complications, prevention of deformities, physiotherapy, rehabilitation, indicators, survey techniques, MIS, record keeping, information about NGO, health education role & responsibilities of MPW in NLEP.

## **Surveillance of communicable diseases**

Meaning, need, scope and benefits of surveillance, types of surveillance of malaria, tuberculosis, polio, diarrhoeal diseases, filariasis, STD, AIDS & leprosy.

# **THEORY – III**

## **NUTRITION AND R.C.H.**

### **Section : A**

#### **Nutrition And Human Health**

##### **Basic principles of nutrition**

1. Introduction to nutrition - Definition, relation of nutrition to health, relation of other important factors to nutritional status and health, classification and functions of foods, body building, energy yielding and protective foods. Nutrients - carbohydrates, proteins, fats, vitamins, minerals, water and cellulose; functions, sources and daily requirements.
2. Nutritive value of food stuffs : Cereals, pulses, fats and oils, vegetable, milk & milk products, sugar fruits, egg, meat and fish, condiments & spices, beverages, food values".
3. Balanced diet : Definition, factors to be considered in planning meals; improvement of diets; selection of foods; nutritional requirements for special groups & vulnerable groups; improving maternal and child nutrition; balanced diet for various groups, menus from local foods.
4. Preparation and preservation of foods : General principles of cooking; methods of cooking, effects of cooking on nutritive value of common foodstuffs, preservation of foods - household methods; food hygiene-simple household measures for proper handling of food.
5. Cultural factors in nutrition - Food fads, food habits.
6. Malnutrition : Definition, extent of problem, types, causes, inter-relationship of factors leading to malnutrition, e.g. infection, worm infestation, detection of malnutrition, methods for prevention and control.
7. Diet therapy - Dietary requirements in various sicknesses, bland diet, liquid diet, soft or semisolid diet, light diet. Diet in diabetes, peptic ulcer, renal diseases, hypertension, heart diseases. Assisting and guiding family in selection and preparation of foods for members with special dietary needs.
8. Food adulteration practices - Teaching simple techniques to detect adulteration practices, knowledge of adulteration practices harmful to health; implication, and action to be taken by individuals, family and community, food adulteration act.

##### **B. Nutrition education**

1. Need for nutrition education : Factors to be considered in nutrition education, home economics, cultural practices, dietary habits, availability of foodstuffs, rural and urban communities, opportunities for nutrition education, home, clinics, health centres, hospitals, schools, community centre, assessing educational needs of the community, determining nutritional needs of vulnerable groups and special group.
2. Nutrition education - methods and media, discussions, meetings, individual guidance, family & group education.
3. Contents of educational sessions : Selection of food items, consumption of protective foods, methods of cooking to preserve nutritive value, food handling, consumption of food according to requirements, dietary requirement of infants, children, pregnant & lactating mothers. Common causes of malnutrition, locally prevailing types of malnutrition viz protein energy malnutrition, anemia, goitre and their prevention and control, establishment of kitchen garden, detection of common food adulterants.



## Health statistics & MIS

**Introduction :** Statistic, vital statistic, health statistic, sources of vital and health statistic - census; registration of birth, deaths and marriages, notification of infectious diseases, records of health centres & hospitals, health surveys. Uses of statistics in community health - Use of data collected from MIS. Definitions rates, ratio, frequency distribution, arithmetic mean; and the range. Collection of statistical data factors to be considered. Role of health workers in participating in data collection procedures.

**Health & vital statistics :** Definition and uses of birth rate, death rate, specific death rate, maternal mortality rate, infant mortality rate, neonatal mortality rate, perinatal mortality rate, expectation of life at birth, prevalence rate, incidence rate, general fertility rate and NRR, Graphic presentation of data; bar diagram, pie diagram and curves.

**Vital statistics registration procedures :** Existing system of registration; defects in the present system. Registration of births, deaths and marriage birth and death registration act, marriage regulation act and child marriage restraint act 1972. Specific methods to improve the system of registration of vital events. Survey of causes of death. Role of health workers in maintaining complete records of vital events. Interpretation and use of statistical information.

**MIS :** Importance, accuracy, advantages, disadvantages, methodology.

### Section : B

#### Reproductive and child health (R.C.H.)

1. **Concept of RCH -** Origin of RCH (ICPD- Cairo conference), concept of integration of services, life cycle approach, community consultation, CNAA, sub centre action plan, down up planning, women empowerment, PLA technique, community participation, quality care and accountability, fifty services covered under RCH at different ages, adolescent health, care after forty, RTI, STI management, involvement of other sectors.
2. **Principles of maternal care -** Prenatal, intranatal, postnatal care, antenatal registration, antenatal visits, essential obstetric care, emergency obstetric management, early detection of complications (e.g. abortion, bleeding, anemia, toxemia, obstructed labour), safe delivery, referral and FRU.
3. **Child health services :**
  - (i) Early neonatal care, weight of newborn, high risk infant and referral.
  - (ii) Breast feeding, complimentary feeding and weaning.
  - (iii) Assessment of growth and development - Weight, height in relation to normal growth curves; milestones of psychomotor development, examination of the newborn.
  - (iv) Immunisation - schedule, vaccines, new vaccines, cold chain, surveillance of vaccine preventable diseases, case investigation, pulse polio, IPPI, AFP surveillance, outbreak response, elimination of neonatal tetanus, Polio eradication and reduction of measles.
  - (v) Diagnosis & management of diarrhoea, ORS, prevention of diarrhoea.
  - (vi) Diagnosis & management of ARI.
  - (vii) Prevention & management of Vit. A. deficiency.
  - (viii) Integrated child development services scheme.
  - (ix) School health services.
  - (x) Adolescent health care.
4. **Factors affecting the health of mother and child :** Socio-literacy, economic status, cultural practices, belief, customs, nutrition and food habits. Availability of health services. Maternal mortality and morbidity infant mortality and morbidity.
5. **Organization of MCH Services :** Arogya seva satra, MCH services in the home, clinic, health centres and hospitals, health workers responsibilities in RCH services, role of dais / traditional birth attendants; Mahila arogya mandal, mother's meeting, anganwa

## **Family welfare including population education**

1. **Review of :** Population explosion problem, national population policy, population education and population goals.
2. **Concept of family welfare services :** Importance of family planning and welfare; health and socio-economic consequences. Human reproduction & physiology of contraception, contraceptive devices (males & females) temporary & permanent, newer contraceptive methods, marriage guidance, infertility-causes and management.
3. **Contraceptive methods :** Natural, chemical, mechanical, surgical, hormonal methods; rhythm methods, foam tablets intra-uterine devices, oral contraceptives, sterilisation and follow-up, use of check list for Cu-T and oral pill, newer contraceptives.
4. **Organisation of Family Welfare :** Community survey for eligible couples, involvement of local leaders and voluntary organisation help of satisfied beneficiaries. Promoting small family norms; health benefits of small family; helping people to accept and adopt family planning methods, dealing with misconceptions, male participation, promotion of condom use and vasectomies, individual counselling in the home, clinic, health centre, planning and providing family planning services based on individual needs. R-14 register, summary of R 14. Register, establishing, depot holders, availability of services at PHC and subcentre, family planning campaigns; orientation camps for family welfare for leaders, population education, planned motherhood.
5. Medical termination of pregnancy and MTP act, basic concepts and availability of MTP services.

Role play - counseling of a couple for acceptance of contraceptive methods.

### **PRACTICALS**

#### **PRACTICAL - I**

### **BASIC HEALTH SCIENCES AND PROGRAMME**

#### **ANATOMY & PHYSIOLOGY**

1. Diagram of cells & tissues.
2. Identification of different types of bones of the body.
3. Diagram of skull bones, vertebrae, long bones & pelvic bone.
4. Diagram of heart, systemic circulation, respiratory, digestive, urinary, reproductive and nervous system.
5. Diagram of special senses : eye, ear, nose, skin, tongue.
6. Demonstrate male & female reproductive system through models.

#### **MICROBIOLOGY & BIOSAFETY**

Demonstration of autoclave, important disinfectants and commonly used sterilization, disinfections & fumigation procedures.

#### **HYGIENE**

1. Checking of personal hygiene amongst trainees.
2. Demonstration of hygienic way of living in family, community, school & anganwadi. Talks on personal hygiene in the community by trainees.
3. Group discussion with community regarding good & bad hygienic practices prevailing in the community.

## **PSYCHOLOGY**

1. Personality assessment by questionnaire method.
2. Role play / exercises by trainees on given situations.
3. Interview with community :
  - To find out different local customs, and traditions affecting health.
  - To find out social problems and antisocial practices relating to health.
  - To find out impact of nuclear and joint family on health.
4. Interaction of trainees with community leaders and their followers with a view to ascertain their positive & negative points.
5. Role play to motivate individuals & groups to improve health practices.

## **PUBLIC HEALTH & COMMUNITY HEALTH**

1. Exercises on responsibilities of health workers.
2. Role play on relationship between members of the health team, local welfare team & village community.
3. Practice in maintenance of records and reports.
4. Daily diary maintenance practice.
5. Exercise on types of cases requiring referral. (Referral forms
6. Identification of local public health problems through survey of the community.

## **ENVIRONMENTAL SANITATION**

1. Demonstration of poor environmental condition in villages / urban slums, sanitary and insanitary well, water supply scheme.
2. Collection of water samples from various sources.
3. Role play-man-made pollution of environment.
4. Practical demonstration on the following :

A sanitary well : maintenance of piped water supply in rural area, soakage pits, sanitary latrines suitable for rural areas, compost pits, smokeless chulha, biogas plant, ventilated house, different types of drains for rural population, washing platform, bathroom, sanitary cow shed, rat proof godown, larvae of flies and mosquitoes, breeding places of flies & mosquitoes.
5. Practical training in the following :

Chlorination of well, construction of soakage pit, compost pits, smokeless chulah, disinfections of excreta, vomitus and fomites of patients suffering from infections diseases.
6. Demonstration of subcentre kit and its contents.
7. Demonstration of biomedical waste management at PHC
8. Preparation of subcentre, village, health action plan, charts, graphs, reports, records.

# **PRACTICAL - II**

## **I.E.C& NON COMMUNICABLE DISEASES MENTAL HEALTH**

### **NATIONAL HEALTH PROGRAMME**

1. Anti malaria programme.
  - \* Blood smear preparation by MPWs.
  - \* Demonstration on microscopic view of parasites / hatchery of gappi fish /
  - \* mosquito larvae / drugs used for treatment / mosquito repellent / insecticides /
  - \* spraying activities / malariometry.
  - \* Exhibition setting by MPWs.
  - \* Talking points on health education & role play.
  - \* Reports writing.

### **SURVEILLANCE OF COMMUNICABLE DISEASES**

- 1) Investigation of epidemic
- 2) Epidemic Control measures
- 3) Chlorination of water
- 4) Disinfections of rooms, clothes, etc.
- 5) Role play on preparation of ORS
- 6) Demonstration using charis & microscope ( hanging drop preparation for cholera vibrio and other slides)
- 7) Identifying larval stages of mosquito
- 8) Visit to infectious ward/Isolation ward : STD Clinic, T.B. Centre, LCU.

### **PRACTICAL-III**

#### **NUTRITION AND R.C.H.**

#### **RCH**

1. Observation of ante-natal case.
2. History taking.
3. Check list to identify high risk ANC & complicated cases.
4. Hb % estimation, urine examination for albumin and sugar.
5. Observation & examination of children between 0-1 and 1-5 years.
6. Plotting up of growth chart.
7. Visit to Anganwadi centres.
8. Observation of Arogya seva satra.
9. Demonstration of different vaccines, their doses and time schedule.
10. Methodology of vaccination - routes of administration.
11. Proper storage of vaccines and maintenance of cold chain.
12. Maintenance, filling and analysis of various forms, reports, records and registers e.g. R 14, 15, 16, 17.
13. Examination of child with diarrhea and ARI. Preparation of ORS and counting of respiratory rate.
14. Vitamin A administrations to children between 9 months to 3 years.
15. Proper reading of VVM
16. Preparation of sub centre action plan.
17. Practice of PLA technique
18. Demonstration of various temporary contraceptive methods.
19. Motivation of family planning acceptors.
20. Demonstration of vasectomy and tubectomy cases.
21. Demonstration on use of condoms on models, disposal of condoms.

## HEALTH STATISTICS & MIS

1. Prepare a list of the record and registers to be maintained at the sub-centre and monthly information required to be sent to the PHC.
2. Study the preparation and maintenance of health register villagewise at the sub centre.
3. Preparation and presentation of village map by the student showing different regions general information.
4. Presentation of information regarding health programmes, family planning, maternal and child health services and vital events.
5. Collection of information on epidemics and natural calamities.
6. Exercise on calculation of IMR, MMR, birth rate, growth rate, death rate etc.
7. Survey of births and deaths.
8. Graphical presentation of data e.g. bar diagram, line diagram etc. by using sub-centre data.
9. Analysis of MIS.

## NUTRITION

1. Demonstration on food values of common Indian foods, malnutrition cases, kitchen garden, simple methods for detection of common food adulteration and collection of samples.
2. Role play on nutrition education with special emphasis on locally available food.
3. Usage of Audio-visual aids in Nutrition education.
4. Food sanitation and inspection of food premises.
5. Iodine test for salt.
6. Preparation of balanced diet for normal & special groups. Menus from locally available foods

### Tools and Equipments required to be available in Institute

Sr.No.	Name of Items	Required Quantity
1	Stethoscopes	10
2	Cushcush speculum	05
3	Sims speculum	05
4	Tongue depressor	05
5	Scissors '7'	10
6	Scissors '5'	10
7	Thumb forceps – toothed	10
8	Thumb forceps – non toothed	10
9	Test tube holders	10
10	Cheatele forceps	10
11	Paracethesis sets	02
12	Towel clips	25
13	Knee hammer	05
14	Needle holder	25
15	Bar speculum	05
16	Artery forceps	10
17	Bandage roller (16 cm x 100 cm)	25
18	Suction tube 10cm	10
19	Blade with handlen	25
20	Hypodermic Needles B.P. handle (pkt of 10)	25
21	Intradermal Needles (pkt. Of 10)	25
22	L.P. needles	25
23	C.D. set	25
24	B.P.Apparatus	02
25	Round Bodied anaroid	02
26	Inch tape	05
27	Torch light (with cells)	05
28	First aid box (big)	02

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