

# **GUIDELINES FOR COMPETENCY BASED POSTGRADUATE TRAINING PROGRAMME FOR DIPLOMA IN HEALTH EDUCATION**

## **Preamble**

The **goal** of the Diploma course in Health Education (DHE) Course is to prepare Health Education Specialists in the country keeping in view the health needs of the country and technology available. A lot of changes have taken place both in the knowledge and practice of health promotion and health education as well as communication technology and methodology globally. Besides, the health scenario has also changed a lot due to emergence of new infections, re-emergence of various infections and rising upward trend of non communicable diseases, all of which requires empowerment of people in promoting their health so as to enable them to stay fit through different need based strategies of health education and Health Promotion. This necessitated updating of the curriculum along with a need to change the title of the course to “Diploma in Health Promotion and Education” (DHPE). The Central Health Education Bureau (CHEB) is conducting Post Graduate Diploma in Health Education (DHE) Course under affiliation to the University of Delhi and is recognized by the Medical Council of India (MCI) since 1971.

### ***SUBJECT SPECIFIC LEARNING OBJECTIVES***

### ***SUBJECT SPECIFIC COMPETENCIES***

The Diploma course in Health Education aims to develop health promotion and education specialists in the country, with competencies and skills to:

1. Assess the health promotion and education needs of the community in different settings.
2. Acquire skills in effective health communication with individuals, families and communities for effecting and sustaining health behavior changes.
3. Acquire skills in capacity building, community organization and networking.
4. Carry out advocacy at different levels to create political will and conducive environment for social and health behavioral changes.
5. Plan and manage effective health promotion and education programmes through designing, implementing and evaluating behavioral and social change interventions.
6. Design and develop appropriate health education and promotional tools in traditional and modern media for facilitating interpersonal and mass communication for effecting health behavioral change.
7. Mobilize resources and elicit community participation and inter-sectoral coordination for effective health promotional and educational programmes.
8. Plan, conduct and evaluate training programmes for building capacities of human resources at different levels in health and related sectors.

9. Plan and conduct need-based, action-oriented social and behavioral research studies on health promotion and education, health behavior related problems, health educational technologies, tools and approaches.

### ***SUBJECT SPECIFIC COMPETENCIES***

#### ***SUBJECT SPECIFIC LEARNING OBJECTIVES***

**By the end of the course, the student should have acquired knowledge (cognitive domain), professionalism (affective domain) and skills (psychomotor domain) as given below:**

##### **A. Cognitive Domain**

**The student at the end of the course should have gained knowledge in:**

- Laws related to health care, Health Statistics
- International agencies involved in health care, objectives, plans of operation, assistance
- Various national health care programmes
- Maternal and Child Health care services
- Reproductive and Child Health Programmes, family welfare and population stabilization
- Infertility, causes and services available
- Adolescent reproductive health programmes
- Geriatric health: problems, rehabilitation
- Microbiology: diseases caused, emerging and reemerging infectious diseases
- Epidemiology, Communicable and Non-Communicable diseases and management
- Environmental & Occupational Health problems in India
- Environmental sanitation - urban, rural, Urban Solid and Hospital Waste Management
- Social and Behavioral Sciences as basis for Health Education and Health promotion in India
- Cultural and social Basis of Health Behavior
- Mental Health: Concept, causes, prevention of mental disorders and rehabilitation of the mentally ill
- Health Programmes/Health Education and Promotion Programmes
- Health Promotion, Education Health and Communication

##### **B. Affective Domain:**

The student:

1. Should be able to function as a part of a team, develop an attitude of cooperation with colleagues, and interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion.
2. Always adopt ethical principles and maintain proper etiquette in dealings with patients, relatives and other health personnel and to respect the rights of the patient including the right to information and second opinion.
3. Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and for effective teaching.

### **C. Psychomotor domain**

**At the end of the course, the student should acquire the following practical skills:**

1. Understand the structure, functioning *vis a vis* objectives, current situation in respect of socio-cultural and demographic parameters, health behaviour (healthy and hazardous), availabilities/utilization/effectiveness/barriers of services/equipments etc., existing health education/IEC/behavioural change communication, interventions and their reach and suggestions regarding areas of improvement by visit to different community settings, institutions, health care delivery facilities, industries/factories, occupational settings, work places, water purification and treatment plants, food processing industries, markets, non-governmental organisations etc.
2. Able to conduct surveys in different settings eg., community, educational institutions, hospitals, workplaces to carry out situation analysis indicating strength, weakness, barriers and opportunities for improvement in health status.
3. To develop research tools eg., check list for observations, interview schedules, questionnaires etc. and pretest these.
4. To plan and conduct interviews, observations, case study and operationalize different types of research studies.
5. To assess needs and plan health education, health promotion interventions in a given setting, concurrently evaluate, monitor, appraise terminally the effectiveness and impact of the same.
6. To study population profile of a given community.
7. To plan, carry out and evaluate mock/simulation capacity building exercises before carrying out training sessions in a given community.
8. To carry out behavioural analyses and design behaviour change intervention programme.
9. To carry out social analyses using socio-metric techniques.
10. To write scripts for press advertisement, newspaper columns, TV and radio programmes, audio jingles, audio-visual spots and exhibitions.

## ***SYLLABUS***

## Course Contents

### Guidelines

The Post Graduate Diploma Course in Health Education is a full time regular course of 2 years duration (2400 hours-**Theory:** 960 hours; **Practical:** 1440 hours).

- a. History of development of Health services and common health problems in India
- b. Health care scenario in India including health care delivery services, different health care survey reports, health planning, role of professional bodies, profit and non-profit agencies
- c. Management of health education programmes

### Part I: Public Health Administration and Health Programmes

#### 1. Public Health Administration

##### 1.1 Community Medicine, Health Care Delivery System

- 1.1.1 Historical development of Health Care Services in India.
- 1.1.2 Common Health Problems in India as distinguished from those of developed countries.
- 1.1.3 Basic human needs vis-à-vis health needs.
- 1.1.4 Various patterns of Health Care Delivery- main features, merits and demerits.
- 1.1.5 Comprehensive Health Care.
- 1.1.6 Health Insurance, ESIC, CGHS, etc.
- 1.1.7 Dispensaries and Hospitals, C.H.C, Primary Health Centre, Sub-Center.
- 1.1.8 Rehabilitation Services
- 1.1.9 Health Financing

##### 1.2 Health Planning in India

- 1.2.1 History of Health Planning in India.
- 1.2.2 Health survey and development (Bhore) committee report.
- 1.2.3 Health Survey and planning (Mudaliar) committee report.
- 1.2.4 National Plans, Planning Commission and Five Year Plans: Social service component and health, achievement, shortcomings and reasons thereof; Chadha Committee and Mukherjee Committee Reports; Kartar Singh Committee Report on multipurpose workers scheme, etc.
- 1.2.5 National Health Policy and other health related national policies.
- 1.2.6 Recent developments in health planning in India.

##### 1.3 Health Services Organization

- 1.3.1 Constitution of India; rights and privileges regarding Health; Union, Concurrent and States lists.
- 1.3.2 National set up, functions of Central Council of Health and Family Welfare



- 1.3.3 Union Ministry of Health and Family Welfare; Directorate General of Health Services, Central Health Education Bureau and various national institutions related to health.
- 1.3.4 State/U.T. level set up, Health Department; Directorate of Health Services; State Health Education Bureau/IEC Bureau.
- 1.3.5 Intermediate (including regional and sub-district) level set up; administration and co-ordination.
- 1.3.6 Local levels; urban roles and functions of different types of Health Organizations.
- 1.3.7 Rural, democratic decentralization (Block, Panchayati Raj), Primary Health Care set-up, Indian Public Health Standards.
- 1.3.8 Functions and roles of personnel at different levels.
- 1.3.9 Role of professional health promotion education specialist/health educator.
- 1.3.10 Mobilization of community resources.
- 1.3.11 Role of professional bodies e.g., MCI, IMA, DCI, NCI, IPHA etc.
- 1.3.12 Role of Profit and non-profit agencies.

#### **1.4 Management for Health Education programmes**

- 1.4.1 Principles of organization; behavioral approach, human factors; authority, power and influence. General Managerial aspects applicable to Health Administration e.g. men, money, resources.
- 1.4.2 Delegation of duty and authority; obligating as a part of delegation; obstacles in delegating and in accepting.
- 1.4.3 Staff functions, Line Functions.
- 1.4.4 Communication principles applicable to management: techniques of communications; orders, manuals and guides.
- 1.4.5 Control, process and requirement; Management information system.
- 1.4.6 Supervision - goals and functions; leadership and supervision.
- 1.4.7 Human Resource Management, Finances, Budgeting.
- 1.4.8 Material management.
- 1.4.9 Public relations and reporting.
- 1.4.10 Alternative Health Financing Mechanisms - NGOs and other such agencies, both profit, non-profit.

#### **1.5 Health Legislation**

- 1.5.1 Public Health laws: need and scope. Historical development
- 1.5.2 Municipal Acts
- 1.5.3 Birth and Death Registration Act
- 1.5.4 Prevention of Food Adulteration Act
- 1.5.5 Indian Drugs and Cosmetics Act
- 1.5.6 The role of community participation in effective enforcement of these laws and R.T.I. - 2005.

- 1.5.7 Consumer Protection Act with latest amendments in relation to public health.
- 1.5.8 MTP, PNDT Acts, age at marriage.

## 1.6 **International Health**

- 1.6.1 Interdependence in health, International health regulations - scope, objectives and functioning.
- 1.6.2. WHO constitution, objectives, plans of operation, assistance.
- 1.6.3. UNICEF, constitution, objectives, functions, roles, various programmes.
- 1.6.4. Other UN agencies.
- 1.6.5. Multilateral, bilateral and other agencies e.g., Rockefeller Foundation, Ford Foundation, Population Council other foundations and Professional Organizations like DFID, EU etc.
- 1.6.6. Global initiatives for primary Health Care-Health Promotion and Education, Alma Ata Declaration, Ottawa Charter, Bangkok Charter on primary health care etc.

## 2. **Health Programmes**

### 2.1 **National Health Programmes**

- 2.1.1 National Rural Health Mission (NRHM)
- 2.1.2 Reproductive and Child Health Programme (RCH)
- 2.1.3 National Vector Borne Diseases Control Programme (NVBDCP)
- 2.1.4 Revised National TB Control Programme (RNTCP)
- 2.1.5 National Leprosy Eradication Programme (NLEP)
- 2.1.6 National Aids Control Programme (NACP)
- 2.1.7 National STD Control Programme
- 2.1.8 National Yaws Eradication Programme
- 2.1.9 Integrated Disease Surveillance Programme
- 2.1.10 National Iodine Deficiency Disorders Control Programme (NIDDCP)
- 2.1.11 National Cancer Control Programme
- 2.1.12 National Mental Health Programme
- 2.1.13 Tobacco Control Activities
- 2.1.14 Drug - De-addiction Programme
- 2.1.15 National Blindness Control Programme
- 2.1.16 National Diabetes, Cardio-vascular and Stroke Programme
- 2.1.17 Trauma and Injuries Prevention and Management Activities
- 2.1.18 Deafness Control Programme
- 2.1.19 Health Care of Elderly

### 2.2 **Maternal and Child Health (MCH)**

- 2.2.1 Organizational set up of Maternal and Child Health Services, Historical Development of MCH Services, Organizational set up at centre, state, district and block levels. Comparison of set up of MCH services in various states.
- 2.2.2 Maternal Care: - Components of maternal care, Antenatal care, Natal care, Post-natal care, Immunization in maternal care, Nutrition in maternal care. Maternal morbidity and mortality: Causes, Preventive measures.
- 2.2.3 Infant and Child care: care of newborn, care of infant, Components of child care, care of child from 1 to 5 years, Immunization in child care, Nutrition in child care, care of handicapped children and rehabilitation; services available for child care at various levels. Childhood morbidity and mortality: Causes, preventive measures.
- 2.2.4 Problems in delivering utilization of Maternal and Child Health Services and corrective measures required.
- 2.2.5 Health education for Promotion of Maternal and Child Health Services; Identification of educational opportunities in various settings; assisting other health personnel in education for Maternal and Child Health.
- 2.2.6 New initiatives in the field of Maternal and Child Health.

### **2.3 Family Welfare and Population Stabilization**

#### **2.3.1. Concept of Family Planning and Population Stabilization**

History and Development; Family Planning Programme in the post independence period; Family Planning programme in the Five Year Plans. Integrated approach to Family Planning and Maternal and Child Health, need for small family size - economic, health, socio-psychological, ecological and eugenic, Historical Evolution of Family Planning/Welfare activities in India.

#### **2.3.2 Organizational set-up of Reproductive and Child Health Programmes.**

Central, State, District, Block and Peripheral levels, urban set up; role of personnel at different levels under the multipurpose workers scheme; operation of post-partum hospital programme.

#### **2.3.3 Conventional methods of contraception**

Classification of methods; mechanical devices, chemical contraceptives and natural methods, advantages and limitations of each method; services available.

#### **2.3.4 Intrauterine Contraceptive Devices**

Various types of I.U.Ds, motivation for I.U.D. acceptance.

#### **2.3.5 Oral contraceptive methods:**

Various types of oral contraceptives: Motivation for acceptance of contraceptive methods.

#### **2.3.6 Sterilization:**

Permanent methods of sterilization and motivation for acceptance of sterilization.

#### **2.3.7 Medical Termination of Pregnancy**

Medical Termination of Pregnancy (MTP) Act; problems in implementation of MTP Act; services available and role of health educator/health Promotion education specialist in counselling.

2.3.8 **Infertility**

Causes of infertility in the male and female; need for investigation of both partners, services available.

2.3.9. Health Educational and Promotional programmes for family planning/family welfare, identification of educational opportunities for family planning/family welfare, barriers in education for Population Stabilization and problem solving.

2.3.10 **Educational programmes for Family Welfare and Population Stabilization**

Role of health education specialist in planning, conducting and evaluating health educational programmes viz., special campaigns, intensive drives, exhibitions, leader's orientation camps etc.

**2.4 Schools, Adolescent Health and Population Education**

2.4.1. Introduction to **school health and population education**, component of school and population education, development of school health education and service and population education programmes in India.

2.4.2. **Health appraisal:** Nature of health appraisal; cumulative health record of school children, role of health personnel, teachers and parents; educational opportunities in the process.

2.4.3. **Healthful school living:** School sanitation including hostel sanitation-building, ventilation, lighting, protected water supply, sanitary facilities, promoting interpersonal relationship between teacher and pupil and among pupils; games and recreation facilities, child guidance; health counselling.

2.4.4. **Nutrition in school health programme:** Nutrition education, feeding programmes including mid-day meals, food sanitation.

2.4.5. **Preventive and curative services in schools:** School health clinic, role of medical officers in school health education, immunization, accidents and emergency services, health of school personnel, health education opportunities in the process.

2.4.6. **Curriculum planning for health and population education:**

(a) Need for the preparation of health and population education curriculum for different age groups, integration of health and population education in existing curriculum.

(b) **Laboratory session:** (i) the students will prepare and present curricula on health and population education for different age group, (ii) The students will prepare teaching units in health and population education for selected age groups in schools.

2.4.7. **Teacher preparation for health and population Education.**



- (a) Teacher's roles and responsibilities in health appraisal, health instruction and health and nutrition services, curriculum analysis with special reference to health and population education.
  - (b) **Laboratory sessions:** The students will prepare an in-service training programme in health and population education for teachers.
- 2.4.8. Adolescent **Health:** Healthy Life Style, Sex Education, AIDS awareness, Mental health, Skill building
  - 2.4.9. Health Education and services for out of school children.
  - 2.4.10 School as health promoting setting

## **2.5 Oral health**

- 2.5.1 Oral Health Problems
- 2.5.2 Epidemiology and control measures
- 2.5.3 Community Education for oral health promotion

## **2.6 Geriatric Health**

- 2.6.1 Geriatric health problems
- 2.6.2 Epidemiology and control measures
- 2.6.3 Disabilities of elderly and programme for their rehabilitation
- 2.6.4 Community Education and Social Security Measures

## **Part II Basic Sciences in Relation to Health Promotion and Education**

### **1. Holistic approach to Health**

- 1.1. Concept of Health and disease, evolution of concept of Modern medicine.
- 1.2. Definition, scope of community medicine.
- 1.3. Natural history of disease, levels of prevention.

### **2. Systems of Medicine in India**

- 2.1. Definitions of various systems of medicine.
- 2.2. Approaches of these systems to health and sickness.

### **3. Anatomy and physiology**

- 3.1. Introduction to Anatomy and Physiology, definition of anatomy and physiology; plan of the body and layers of the body wall; location of various organs and their functions; structure and functions of the cells and tissues.
- 3.2. Different organs, systems, special sense organs in the body –their structure and functions.
- 3.3. Normal growth and development -Growth and development in various age groups; types of physical growth.

### **4. Microbiology, Helminthology and Medical entomology**

- 4.1. Introduction to Microbiology - infective material - collection, dispatch and disposal of infected material.
- 4.2. Characteristics, growth, multiplication of different types of microbes - Bacteria, virus, fungi, Rickettsia Mycoses, Parasites, Protozoa, Helminths, Zoonoses and their common infections
- 4.3. Animals, arthropods as sources of human disease- vector control measures
- 4.4. Diseases caused by different microbes –Bacteria, virus, fungal etc.
- 4.5. Immunity types - natural and acquired herd immunity - active and passive immunization; toxoids, vaccines, antisera, gamma globulins.
- 4.6. Sterilization and disinfection - definition of terms; methods of sterilization and disinfection.
- 4.7. Microbiology of specific diseases i.e. SARS; Diphtheria; Pertussis; Measles; Mumps; Tuberculosis; Leprosy; Cholera, Typhoid; Bacillary dysentery; Poliomyelitis; Viral hepatitis; Malaria; Filaria; Plague; Yaws; Bird flu and Emerging and re-emerging infectious diseases.

## **5. Basic Epidemiology, Control of Communicable and Non-Communicable diseases**

- 5.1. Concept of epidemiology- Definition, concept, uses in public health. Interaction between agents, host environment; definition of terms-sporadic, endemic, epidemic, pandemic, levels of preventions.
- 5.2. Communicable diseases - Definition of communicable disease, reservoir and source of infection, mode of exit and entry of organism, channel of transmission, susceptible host, definition of terms i.e. case, carrier, reservoir, contact, fomite, vector, vehicle etc.
- 5.3. Different basic epidemiological studies as tools for determination of association of various factors in diseases causation and the strength of such associations - Retrospective, prospective and experimental studies.
- 5.4. Health Surveys - Principles, uses and methods of health surveys, special surveys for screening for disease and ill health.
- 5.5. Immunity definition- concept and types of Immunities; Herd immunity and its importance in public health.
- 5.6. Immunization methods, schedule, storage of vaccines - cold chain, maintenance, side effects of immunization.
- 5.7. Classification of communicable diseases - Communicable diseases caused by inhalation, ingestion, direct contact and inoculation; Principles in control of those diseases and health education components.
- 5.8. Specific communicable disease occurrence, mode of spread, manifestations, prevention and controls of the following diseases i.e. Chicken-pox; Measles; Tuberculosis; Diphtheria; Whooping Cough; Tetanus; Cholera; Typhoid and Paratyphoid; Diarrhea; Dysentery and food poisoning; Poliomyelitis; Viral hepatitis; Helminthic diseases i.e., hookworm, roundworm, Tapeworm and

thread-worm; malaria, filaria; leprosy, STD, AIDS/HIV, common skin infections like, scabies; rabies; trachoma and conjunctivitis, SARS, Dengue fever, Emerging and re-emerging diseases.

- 5.9 Epidemiology of non-communicable diseases - their etiology, prevention, control management of following diseases: (i) cancer, (ii) cardiovascular, (iii) blindness, (iv) renal disease, (v) neurological disorders, (vi) mental/psychiatric disorders, (vii) Muscular-skeletal disorders such as arthritis and allied diseases, (viii) Chronic Respiratory disease (e.g. Chronic Bronchitis, Asthma, Emphysema) Accident and Trauma, (x) Dementia, (xi) Diabetes, (xii) Obesity and various metabolic and degenerative diseases, (xiii) disabilities resulting from communicable diseases, (xiv) disorders of unknown cause (xv) substance abuse etc.

## **6. Environmental Health**

- 6.1. **Introduction to the Environmental Health and its concepts** physical, biological and social.
- 6.2. **Environmental health problem in India** - Problems in relation to drinking water, sanitation, refuse, fresh air, food, housing, public places and public gathering.
- 6.3. **Diseases relating to water**, Sanitation, and environmental degradation.
- 6.4. **Water and disease** - Importance of water for good health; potable and polluted water; sources of water; diseases transmitted through water - pollution and protection of water supply; sources of pollution. Methods of protection of water supply at source; in storage and in distribution; Prevention of pollution in wells, hand pumps, springs, surface and rain water sanitary well, tank and pond. Purification of water for domestic and community supply. Slow and rapid filtration; purification of water for domestic use; chlorination of wells and hand pumps.
- 6.5. **Disposal of waste water**: waste water on a small scale and in individual house, such as soak pits and kitchen gardens. Health hazards of dampness and water stagnation; methods of disposal of waste water on large scale - drainage System.
- 6.6. **Environmental sanitation** - urban, rural - National schemes for the improvement of environments; environmental sanitation in the community.
- 6.7. **Diseases transmitted through excreta**. Excreta as a source of infection, channels of transmission and the disease transmitted. Sanitary latrine as sanitation barrier. Disposal of human excreta treatments and disposal of sewage.
- 6.8. **Collection and disposal of refuse**, Health hazard of refuse; diseases connected with improper collection and disposal of refuse; various methods of refuse disposal and drawbacks therein, dumping, incineration, composting with human or animal excreta, disposal in sea and sorting.
- 6.9. **Urban Solid and Hospital Waste Management**
- 6.10. **Rural Sanitation-** Total Sanitation Campaign.

- 6.11. **Food hygiene and sanitation:** Food sanitation. Public Health importance of food and milk sanitation; sources of contamination; sanitation measures for food, milk and drinks; milk pasteurization; sanitation of slaughter house and markets.
- 6.12. **Sanitation of food establishments** Sanitation of premises, preparation, storage and serving of food; food handlers, washing of utensils, sources of contamination; role of Health Educator in context of sanitation of food establishment.
- 6.13. **Housing and Health.** Principles of healthful housing and ventilation. Sanitation of camps, theatres and cinema halls. sanitation measures in camps; sanitation of theatres and cinema halls. sanitation of swimming pools. diseases likely to be transmitted through swimming pools and preventive measures.
- 6.14. **Control of insects, rodents and stray dogs.** Diseases transmitted by insects and rodents, control of flees, mosquitoes, and rodents; rat-proofing, destruction of stray dogs, role of health educator.
- 6.15. Community sanitary survey.
- 6.16. Personal hygiene and environmental health.
- 6.17. Healthy settings.

## **7. Occupational Health**

- 7.1. **Introduction:** Basic concepts of occupation health and its components.
- 7.2. **Environment at work:** Physical environment, Socio-physiological environment protection against accidents.
- 7.3. **Occupation diseases/hazards:** Classification and prevention of occupational diseases/hazard and their prevention.
- 7.4. **Factories Act; Industrial Health Services**
- 7.5. Health hazards in agriculture
- 7.6. Computer Vision Syndrome
- 7.7. White Collar Syndrome
- 7.8. Role of health education in Occupational Health

## **8. Nutrition and Dietetics**

- 8.1. Concept, scope and importance of nutrition in promotion of health
- 8.2. Classification of foods
- 8.3. Food habits, cultures and practices,
- 8.4. Nutrient loss in processing, storage and cooking,
- 8.5. Adulteration, fortification, enrichment of food,
- 8.6. Assessment of nutrition and diet survey in individual, family and community level,
- 8.7. Dietary prescription: Planning of balanced diet for vulnerable groups, in health,
- 8.8. Health programmes related to nutrition,
- 8.9. Growth monitoring, nutrition supplementation and nutrition education,



- 8.10. Spectrum of malnutrition,
- 8.11. Micronutrient malnutrition,
- 8.12. Prevention and control of malnutrition,
- 8.13. IEC on food and nutrition at different levels,
- 8.14. Importance of investment in nutrition.

**9. Concepts and Skills of Emergency Preparedness including Basic Life Support**

- 9.1. Disasters: concept, types, natural and manmade disaster.
- 9.2. Epidemiology and health impact of calamities.
- 9.3. Disaster preparedness and response: concept, principle and application,
- 9.4. Management of disasters like flood, cyclone, earthquake, fire, famine, industrial accident.
- 9.5. Multi-sectoral approach in disaster management.
- 9.6. Organization of health sector for disaster management
- 9.7. Environmental health in disaster situation.
- 9.8. Monitoring and management of nutrition of disaster victims.
- 9.9. Community emergency preparedness.
- 9.10. Content of community education for different types of disaster
- 9.11. Basic life support.
- 9.12. Advanced life support.
- 9.13. Cardio-pulmonary resuscitation.

**10. Health Statistics**

- 10.1.1. Introduction to theoretical and applied statistics with special reference to Health Statistics; specification, estimation, testing of hypotheses and inference; sources and uses of Health Statistics.
- 10.1.2. Measures of morbidity-incidence rate, prevalence rate, inception rate, case fatality rate.
- 10.1.3. Measures of mortality; Crude death rate, age-sex ratio, specific death rate, infant mortality rate, proportional mortality rate, neonatal mortality rate, post-neonatal mortality rate peri-natal mortality rate, and concept of standardized death rate.
- 10.1.4. Presentation of health data: Classification and tabulation of data, graphic presentation of data, linear graph, bar chart, pie-diagram, histogram, frequency polygon, age-pyramid.
- 10.1.5. Measures of central tendency/location: Mean, median and mode.
- 10.1.6. Measures of dispersion/variation range, standard deviation, variance and coefficient of variation.
- 10.1.7. Basic concepts of correlation and association. Basic concepts of probability.
- 10.1.8. Concept of test of significance- the chi-square test Measures of health, direct and indirect indicators of health.

## **11. Demography**

- 11.1.1. Introduction to demography: concepts, definition, purpose and uses. Sources of demographic data-census, vital registration, sample registration, National Sample Surveys. Errors in vital registration system in India and suggestions for improvement
- 11.1.2. Population trends in the world and in India; Population theories - Malthusian, Marxian and Demographic transition theories, their consequences - economic, social and health; and remedies - the role of agricultural production, industrialization, migration and family planning.
- 11.1.3. Factors affecting fertility; Biological factors - menarche and menopause, lactation and post-partum amenorrhea; demographic factors - age, age at marriage, infant and childhood mortality, socio-economic factors - income, women's employment, education, type of family.
- 11.1.4. Measures of fertility; Crude birth rate, general fertility rate, age specific fertility rate, general marital fertility age - specific marital fertility rate, total marital fertility rate, gross reproduction rate and net reproduction rate.
- 11.1.5. Concept of life tables and its uses.
- 11.1.6. Population projection and estimation of population.

## **Part III: Behavioural Sciences and Research, Communication for Health Education and Promotion**

### **1. Introduction to Social and Behavioral Sciences as basis for Health Education and Health promotion in India.**

- 1.1 Definition, nature, scope, contributions, limitations of behavioral sciences.
- 1.2 Sociology, Social Psychology, Socio-cultural Anthropology and their relevance to health behavior.
- 1.3. Social sciences like, economics, history and political science in relation to Public Health.

### **2. Basis of Human Behavior**

- 2.1 Perception Process
- 2.2 Beliefs, values and attitude formation
- 2.3 Personality: concepts and types
- 2.4 Defence mechanism
- 2.5 Motivation: motivation process, theories of motivation, designing motivational strategies for health education and promotion.
- 2.6. Learning: concept, principles, process, theories and their relation to behavior change.

### **3. Group Dynamics**

- 3.1 Introduction to Groups: Types, functions, roles.

- 3.2 Understanding Group Process.
- 3.3 Influence of groups on the formation of norms and attitudes.
- 3.4 Leadership and group performance.
- 3.5 Group pressures and structure and properties of groups.
- 3.6 Group Cohesiveness.
- 3.7 Communication pattern in task oriented groups.
- 3.8 Diagnosing group needs.
- 3.9 Decision making in groups.
- 3.10. Building Teams.

#### **4. Human Behavior Theories/Models relevant to Health Promotion and Education**

- 4.1 Trans Theoretical Model
- 4.2 Health Belief Model
- 4.3 Relapse Prevention Model

#### **5. Cultural Basis of Health Behavior**

- 5.1 Culture - definitions and explanations of terms such as acknowledge, beliefs, norms, values, taboos, habits, traditions, superstitions, and magic in relation to human behavior and health.
- 5.2 Culture - types components and propositions in relation to cultural change.
- 5.3 Cultural factors influencing health.
- 5.4 Influence of culture on perception of health and disease.
- 5.5 Influence of culture on formation of social attitudes.

#### **6. Social Basis of Health Behavior**

- 6.1 Society, community, social/community structure.
- 6.2 Rural and Urban Community Leadership.
- 6.3 Family Types, kinship status, roles, values and norms.
- 6.4 Social stratification, social deviance, social influence, social problems.
- 6.5 Process of socialization and bio-social factors influencing individuals.
- 6.6 Patterns of rural-urban living in relation to public health practices.
- 6.7 Crowd / Mob behavior, public opinion and social perception.

#### **7. The Dynamics of Behavior Change**

- 7.1 Introduction to change process, dynamics of planned behavioral change.
- 7.2 Factors influencing health behavior changes.
- 7.3 Strategies to overcome barriers in change process.
- 7.4 Adoption and diffusion process.

#### **8. Mental Health**

- 8.1 Concepts of mental health and relation between mind and body.

- 8.2 Criteria of healthy and unhealthy mind.
- 8.3 Mechanism of adjustment, physical, social and psychological needs. Some specific areas of mental health like ageing, delinquency and criminality, sub-normality, suicide, neurosis, psychosomatic illness etc.
- 8.4 Causes of mental/behavioral disorders, heredity vs. environment.
- 8.5 Prevention of mental disorders and rehabilitation of the mentally ill.
- 8.6 Community mental health.
- 8.7 Role of health educator in the field of mental health.

## **9. Community organization**

- 9.1 Community Organization; nature, concepts of community work, meaning of community organization, basic assumptions of community organization.
- 9.2 Community organization - principles and process.
- 9.3 Importance of community organization in Health Promotion and Education programme.
- 9.4 Importance of community organization for Health Promotion of rural and urban communities.
- 9.5 The role of health education specialist as a change agent in community organization.
- 9.6 Role of other agencies (voluntary and government) in the process of community organization.
- 9.7 Mobilizing the community for action; formation of groups/committee, including nature and function and principle to be used for effective community work.
- 9.8 Power and Authority and its relevance to Health Promotion and Education.

## **10. Community Development**

- 10.1 Introduction to community development, definition, philosophy and principles of community development, community development as a process, as a programme as a method and a movement, need for community development in India.
- 10.2 History of community development programme in India.
- 10.3 Progress of Community development in India including tribal blocks
- 10.4 Organizational set and functions of community development at the Central, State, District and Block levels.
- 10.5 Panchayati Raj- Integration of Panchayati Raj with Community programme.
- 10.6 Role of Health Education in community development programme.
- 10.7 Critical Review of community development programme in India.

## **11. Social Research Process**

- 11.1 **An Introduction to Social Research:** Definition of scientific method and social research, scope of social research in Health Promotion and Education.



## 11.2 **An Overview of Scientific Method of Social Research**

- 11.2.1 Problem identification and justifications
- 11.2.2 Formulation of objectives and hypotheses.
- 11.2.3 Concept and relationship among variables: independent, dependent and intervening variables.
- 11.2.4 Classification of research studies: exploratory, descriptive, diagnostic, experimental, ex-post facto, case study, survey research and operational research.
- 11.2.5 Description, similarities and differences among survey, longitudinal, cross-sectional studies.
- 11.2.6 Research documents dealing with Health Education and allied fields - Report Series, Journals and Research Papers etc.

## 12. **Sampling Procedure**

- 12.1 Concept and importance of sampling in research
- 12.2 Concepts of Probability and non-probability
- 12.3 Types of sampling  
Random, Systematic, Stratified, Cluster, Quota, Accidental, Purposive
- 12.4 Determining size of a sample
- 12.5 Sampling errors.

## 13. **Data Collection-techniques and procedures for conducting social research study**

- 13.1. Concept and types of data: primary and secondary data, quantitative and qualitative data, nominal, ordinal data.
- 13. 2. Instruments of data collection:
  - i) Structured and Unstructured Interviews
  - ii) Questionnaires
  - iii) Observation
  - iv) Socio-metric Technique
  - v) PRA Technique
  - vi) Case study
  - vii) Projective Technique
  - viii) Attitude Scales
  - ix) Focus Groups Discussion
  - x) Content Analysis
  - xi) Review of Secondary data sources.
- 13.3. Development of Research tools: Process and procedures
- 13.4 Concepts of reliability and validity

## 14. **Data tabulation and Analysis**

- 14.1 Preparing tabulation

- coding Process
- editing
- 14.2 Plans for data analysis
  - Central Tendency
  - Variance
  - Test of Significance
  - Measure of strength of associations
  - Concept of univariate, bivariate and multivariate analysis
- 14.3 Dummy tables preparation / Frequency distribution
- 14.4 Visual Presentation of data
- 14.5 Use of computer in data analysis including relevant software packages.

## **15. Reporting Research Findings**

- 15.1 Features and purpose of a good report
- 15.2 Interim report and final report.
- 15.3 Structure of a good report: Problem, methodology, results, interpretation and conclusions.

## **16. Evaluating Health Programmes/Health Education and Promotion Programmes**

- 16.1 Concept and process of evaluation.
- 16.2 Types and importance of evaluation in public health.
- 16.3 Technique and tools, design and procedures.
- 16.4 Indices of measurement and selection of criteria of effectiveness in context of over all objectives of evaluation.

## **17. Pre-testing Health Education Materials**

- 17.1 Pre-testing: concept, importance and process.
- 17.2 Basic principles of pre-testing.
- 17.3 Methods and techniques for pre-testing.
- 17.4 Constraints, problem and limitations.
- 17.5 Reporting the findings.

## **18. Health Promotion and Education**

- 18.1.1. Introduction to Health Education and health promotion; definition, objectives, concepts, philosophy, importance and need of health education.
- 18.1.2. Historical developments - milestones of Health Education and Health (Alma-Ata conference Ottawa Charter, Bangkok Charter etc.).
- 18.1.3. Principles of Health Education.
- 18.1.4. Roles and attributes of the Health Education specialist and health professionals in bringing about health behavioral change.

- 18.1.5. Approaches and processes used in Health Education programme for Health Education and Health Promotion.
- 18.1.6. Objectives of Health Education and Health Promotion.
- 18.1.7. Competencies, professional ethics and standards for Health Education and Promotion specialist.
- 18.1.8. Issues related to Health Promotion with respect to individual settings

## **19. Health Communication/Communication for Health**

- 19.1.1 Communication, definition, process and its application in Health Education.
- 19.1.2 Models of communication and basic elements of communication (some message channels destination and effects).
- 19.1.3 Encoding and decoding processes.
- 19.1.4 Theories and models of communication.
- 19.1.5 Principles of communication for social change (IEC and behavioral change communication -BCC).
- 19.1.6 The message, structure and treatment of message.
- 19.1.7 Channels of communication - meaning and definition, reaching out to target group
- 19.1.8 Problems in communication with respect to dimensions of group goals and socio cultural system.
- 19.1.9 Factors (positive and negative) influencing communication and conditions necessary for effective communication.
- 19.1.10 Communication breakdowns and barriers to communication.
- 19.1.11 Traditional and modern channels of communication.
- 19.1.12 Methods used for Health communication:
  - a. in inter-personal communication (Interview, counselling, interactive, Question Answer Session, e-communication etc.)
  - b. in Group settings (Group discussion, focused group discussion, panel discussion, seminar, lectures, and role plays and so on).
  - c. different methods used for Mass Communication, traditional media and modern media.

## **20. Communication Channels for Interpersonal Communication, Group Communication and Mass Communication**

- 20.1.1. Media-meanings of the term, definition.
- 20.1.2. Classification of media.
- 20.1.3. Mass Communication as a medium instrument of social change.
- 20.1.4. Cooperative efforts of various media, selection and choice of media-adaptability of message.
- 20.1.5. Strengths and limitations of various media.

## **21. Printed Material**

- 21.1.1. Preparation, pretesting and production of printed materials (Handbills, folders and pamphlets) for Health Education programme; Steps involved.
- 21.1.2. Preparation of scripts for press release, Steps involved.
- 21.1.3. Preparation of printed material for special campaigns - steps, advantages and disadvantages.
- 21.1.4. Writing text for speeches.
- 21.1.5. Art of Public speaking.
- 21.1.6. Production process selection of photographs, printing process, calling quotations, preparation of layout, press copy, checking proofs and giving print order.
- 21.1.7. Maintenance and distribution of printed materials, various procedures in maintaining the printed material, procedure for distribution.
- 21.1.8. Collaboration with other agencies, procurement of the printed material and coordination for production of printed material.

## **21.2. Projected Aids**

- 21.2.1. Projected aids - definition.
- 21.2.2. Role of projected aids in Health Education.
- 21.2.3. Pattern of development of projected materials.
- 21.2.4. Media production - concept and philosophy.
- 21.2.5. Projected materials - types and their characteristics.
- 21.2.6. Production of filmstrips and slides and their pretesting.
- 21.2.7. Production of audio-visual spots - planning and organization.
- 21.2.8. Audio-visual programme in action - preview and selection of materials, organizing, implementing and evaluating the programme.

## **21.3. Non-Projected Aids.**

- 21.3.1. Non-projected aids-definition; Use of non-projected aids in Health Education (what, why and how of these materials).
- 21.3.2. Process of planning for production and costing; Preparation of inexpensive materials such as flash-cards set, flip chart, flannel graph, poster, charts and diagrams and puppets, etc.
- 21.3.3. Criteria for display and bulletin boards and their preparation.
- 21.3.4. Preparation of simple mass media such as banners, hoardings, placards and their use in various situations.
- 21.3.5. Preparation of layout and dummy for leaflets, folders and displays.
- 21.3.6. Preparation and use of simple Tran–slides, overhead transparencies through projection for demonstration and teaching purposes.

## **21.4. Exhibition**



- 21.4.1. Concept, meaning, importance and role of exhibitions as mass media of communication; types of exhibitions, their purposes and application in the education and promotion programme.
- 21.4.2. Principles of planning an exhibition, techniques of developing exhibition scripts.
- 21.4.3. Identification of resources needed, tapping the local resources and working out estimates under different heads for a given type of exhibition.
- 21.4.4. Setting up and organizing an exhibition.
- 21.4.5. Visualization, designing and selection of visuals and their production.
- 21.4.6. Techniques of evaluation of exhibition.

## **22. Use of ICT and other latest/Modern Technologies in Health Education.**

- 22.1. Use of Information Technology and latest technology for Health Education
- 22.2. Use of Internet as a source of Health Information

## **23. Training and Capacity Building**

- 23.1. **Training:** Definition and concepts of training, difference between education and training, administrative considerations in training.
- 23.2. **Training process:** some conceptual models, functions of training, training strategy, establishing and defining training goals, principles and steps in curriculum development.
- 23.3. **Introduction to teaching learning methods:** Advantages and limitation. of various teaching and learning methods; principles to be followed in selecting and using different methods for e.g. lecturing, group discussion, Buzz-group, problem solving, brain storming, demonstration, symposium, panel, case study, role play, programmed instruction, colloquy, dialogue, workshop, seminar etc.
- 23.4. Evaluation of teaching-learning methods
- 23.5. **Lesson Plan:** Components, principles and steps in preparation of lesson plan.
- 23.6. **Field Practice and Demonstration Area:** Need and importance of FP and DA. Methodology of developing and utilizing FP and DA for training and programme development.
- 23.7. **Training Evaluation:** Need and importance of evaluation in training principles and procedures in evaluating training courses and various aspects of training.

## **24. Programme Planning for Health Education and Health Promotion**

- 24.1 Concepts, principles and process of Programme Planning as an administrative tool and an educational process.
- 24.2 Community diagnosis needs assessment; facilitators and barriers for action programme.
- 24.3 Planning for data collection and preparation of tools.
- 24.4 Resource mapping (apparent and potential).

- 24.5 Analysis and Interpretation of data, drawing inference for planning community Health Promotion programme (during concurrent field work).
- 24.6 Framing objectives; short and long term objectives, indicating change in behavior to be achieved.
- 24.7 Preparation of plan of operation phase wise (concurrent field work), report writing - preparation and presentation (concurrent field work).
- 24.8 Implementation and Evaluation of the Planned Programme (concurrent field work)
- 24.9 Supervision
- 24.10 Report writing - preparation and presentation (concurrent fieldwork).
- 24.11 Proposal writing and budgeting for communication programme of Health Promotion.

### ***TEACHING AND LEARNING METHODS***

Teaching and learning methods would include the following:

#### **Teaching methodology**

Teaching methodology includes:

1. Didactic lectures
2. **Seminar/journal club presentation (once a fortnight).**

Evaluation sheets may be incorporated for the purpose of assessment of presentations. The following points may be considered in the scheme for evaluation of presentations.

- Topic selection
  - Completeness of presentation
  - Clarity of presentation
  - Understanding of the subject and ability to convey the same
  - Whether relevant references have been consulted
  - Ability to convey points in favour and against the subject under discussion
  - Proper use of audio-visual aids
  - Ability to answer questions
3. **Attending clinical grand rounds / clinic-pathological conference**  
The post graduate students are encouraged to attend lectures and grand rounds of other clinical and basic science departments of the hospital.
  4. **Attendance at Scientific meetings, CME programmes**  
The post graduate students are expected to attend meetings related to subject, present papers/posters in these meetings.
  5. **Paper/poster presentation:**  
A post graduate student of a post graduate degree course in broad specialities/super specialities would be required to present one poster presentation, to read one paper

at a national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.

6. **Teaching skills:**

The post graduate students shall be required to participate in the teaching and training programme of undergraduate students and interns.

7. A **logbook** should be maintained recording the duration of posting, the period of absence, if any, skills performed, and remarks if any by the teacher/faculty member. The logbook should also record journal clubs, seminars attended and partaken as well as undergraduate teaching activities the post graduate student has participated and should be signed by the faculty in charge.

8. Department should encourage e-learning activities

The time distribution for Theory and skill-based learning for two year Diploma training programme would be as under:

Theory : 960 hours; Practical : 1440 hours

**Postings:**

**The details of time allocation for practicals is as under:**

**I. Intramural (in - house): 480 Hours (as per details below):**

S. No.	Skills based Activities	Hours allotted
1.	Assignments, case studies	70
2.	Seminars, Panel discussion etc.	70
3.	Presentations skills	80
4.	Demonstration	60
5.	Script writing	60
6.	Exposure to Modern Information, Communication Technology	80
7.	Other Skill Orientation (Traditional and Folk Media)	60

**II. Extra mural Supervised Field Training (S.F.T.) 240 Hours**

**The details of time allocation for extra-mural practicals are as under:**

S. No.	Activities	Hours allotted
1.	Visit to Water Treatment Plant	6
2.	Visit to Sewage disposal plant	6
3.	Visit to SOS Village/ NGOs	18

4.	Visit to National Health Programmes	120
5.	Visit to NICD/NVBDCP	12
6.	Visit to International agencies	24
7.	Industrial visit	12
8.	RHC Najafgarh/ PHC	12
9.	Visit to sister institutions	30

### **III. Extra mural- Concurrent Field Training (CFT) (Project work): \* 720 Hours**

**The details of time allocation for extra-mural CFT practical is as under:**

<b>S. No. Activities</b>	<b>Hours allotted</b>
1. Preparatory hours	30
2. Community Diagnosis	90
3. Educational Diagnosis	90
4. Planning Health Promotion and Education Programme	120
5. Implementation of Health Promotion and Education Programmes	180
6. Evaluation of Educational Impact and follow-up	90
7. Report Writing	120

\* Hours distribution may vary depending on the emerging needs.

### **ASSESSMENT**

#### **FORMATIVE ASSESSMENT, during the Diploma training programme:**

**Formative assessment should be continual and should assess medical knowledge, patient care, procedural & academic skills, interpersonal skills, professionalism, self-directed learning and ability to practice in the system.**

#### **General Principles**

Internal Assessment should be frequent, cover all domains of learning and used to provide feedback to improve learning; it should also cover professionalism and communication skills. The Internal Assessment should be conducted in theory and clinical examination.

#### **Plan for formative assessment:**

**Quarterly assessment during the Diploma training should be based on:**

1. Journal based / recent advances learning
2. Patient based /Laboratory or Skill based learning
3. Self-directed learning and teaching
4. Departmental and interdepartmental learning activity
5. External and Outreach Activities / CMEs



The student to be assessed periodically as per categories listed in postgraduate student appraisal form (Annexure I).

**SUMMATIVE ASSESSMENT, at the end of the training**

The summative examination would be carried out as per the Rules given in POSTGRADUATE MEDICAL EDUCATION REGULATIONS, 2000.

The postgraduate examination shall be in two parts:

**1. Theory: There shall be three theory papers, as given below:**

**Paper I:** Basic Sciences in relation to Health and Promotion Education

**Paper II:** Public Health Administration and National Health programmes

**Paper III:** Social and Behavioural Sciences and Research, Communication for Health Education and Promotion.

**2. Clinical/Practical and oral examination:**

Long Case: 1 case

Short Case: 1 case

Practical Exercise:

- i. Exhibits and Spots      ii. Exercises.

**Viva:** Oral examination shall be comprehensive enough to test the candidate's overall knowledge of the subject.

**Recommended Reading:**

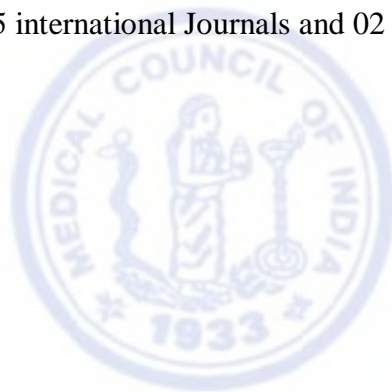
**Books (latest edition):**

1. Park K: Textbook of Preventive and Social Medicine; M/S Banarasidas Bhanot Publishers, Jabalpur.
2. Mahajan B K and Gupta M C: Textbook of Preventive and Social Medicine; Jaypee Bros. Medical Publishers (P) Ltd., New Delhi.
3. Sathe P V and Sathe A P: Epidemiology and Management of Healthcare for all; Popular Prakashan, Mumbai.
4. Gordis Leon: Epidemiology; WB Saunders Company.
5. Maxcy-Rosenau: Public Health and Preventive Medicine; Appleton-Century-Crofts, New York.
6. Hollard W W, Detels R, Knox G: Oxford textbook of Public Health; Oxford University Press UK.
7. Hanlon J J, Picket G E. Public Health Administration and Practice; St. Louis.
8. Guilbert J J: Educational handbook for health personnel; WHO offset publication No 35.
9. Barker D J P: Practical epidemiology; Churchill Livingstone.

10. Fletcher R H, Fletcher S W: Clinical epidemiology – The essentials; M/S Williams and Wilkins.
11. Hill A B: A short textbook of Medical statistics; Hodder and Stoughton, London.
12. Mahajan B K: Methods in Biostatistics; M/S Jaypee Bros., NewDelhi.
13. Ghai O P: Essential Pediatrics; Interprint, New Delhi.57
14. Sachdev H P S and Chowdhury P: Nutrition in Children in Developing country concerns; Department of Pediatrics, MAMC,New Delhi.
15. Swaminathan M: Essentials of Food and Nutrition; Bangalore Printing and Publishing Company Limited, Bangalore.
16. Gopalan C and Kaul S: Women and Nutrition in India; NIN, India.
17. ICMR: Nutritive value of Indian foods; NIN, India.
18. Kavonew M and Mikheer M I (WHO): Epidemiology of Occupational health.
19. Jeyartram J: Occupational health in Developing Countries; Oxford University Press, UK.
20. Ananthanarayanan L and Paniker C K J: Textbook of Microbiology; Oriental Longman, Chennai.
21. Dr. Dharama Lingam: Health Education.
22. Education for Health - WHO Publication.
23. Communicating Health - John Hubley

### **Journals**

03-05 international Journals and 02 national (all indexed) journals.



**Postgraduate Students Appraisal Form  
Clinical Disciplines**

Name of the Department/Unit :

Name of the PG Student :

Period of Training : FROM.....TO.....

Sr. No.	PARTICULARS	Not Satisfactory			Satisfactory			More Than Satisfactory			Remarks
		1	2	3	4	5	6	7	8	9	
1.	Journal based / recent advances learning										
2.	Patient based /Laboratory or Skill based learning										
3.	Self-directed learning and teaching										
4.	Departmental and interdepartmental learning activity										
5.	External and Outreach Activities / CMEs										
6.	Thesis / Research work										
7.	Log Book Maintenance										

Publications

Yes/ No

Remarks\*

\*REMARKS: Any significant positive or negative attributes of a postgraduate student to be mentioned. For score less than 4 in any category, remediation must be suggested. Individual feedback to postgraduate student is strongly recommended.

SIGNATURE OF ASSESSEE

SIGNATURE OF CONSULTANT

SIGNATURE OF HOD