SYLLABUS FOR DIPLOMA IN PUBLIC HEALTH (D.P.H)

Goal:-

The candidate during and after the training should be able to implement the knowledge, skills & advances of public health for prevention, control, elimination of diseases of public health importance.

Objectives:-

Knowledge

a) The candidate should have the knowledge regarding epidemiology, prevention, control & management of diseases of public health importance.

b) Knowledge of all relevant public health laws and institutions of public health importance.

c) The candidate should be able to discharge his/ her duties effectively in an administrative capacity in a health organization such as Municipal Corporation.

Skills

a) Should acquire administrative skills essential for smooth functioning of health establishments

b) Should be able to conduct epidemiological investigation of various diseases during epidemic.

c) Should know the criteria for sanitation of various places viz slaughter house, eateries, sewage treatment plants, ports & airport, milk dairies and be in position to inspect & recommend corrections.

d) Should be able to plan, implement & evaluate school health services

e) Should be able to plan, implement & evaluate programmes related to Occupational Health.

DETAIL SYLLABUS:

1) Introduction –

1.1 Prevention of diseases in the community
1.2 Health situation- past & present
1.3 History of public health
1.4 Place & role of preventive medicine in development of social medicine, community health, community medicine.
2) Applied aspects of Preventive Medicine –

2.1 Health
2.1.1 Changing concepts
2.1.2 Definition
2.1.3 Dimensions
2.1.4 Concepts of wellbeing
   a) PQLI
   b) HDI
2.1.5 Spectrum of Health
2.1.6 Determinants of Health
2.1.7 Rights & responsibilities
2.1.8 Indicators of health
   a) Mortality
   b) Morbidity
   c) Disability
   d) Others
2.1.9 Health care system
   a) Characteristics
   b) Levels
   c) Primary Health Care

2.2 Disease
2.2.1 Concept
2.2.2 Natural history of diseases
   a) Epidemiological triad
   b) Risk factors

2.3 Concepts of control
2.4 Concepts of prevention
   2.4.1 Modes of interventions
   2.4.2 Levels of preventive health services (urban & rural)

2.5 Health Management

3) Biostatistics
3.1 Introduction
3.2 Data
   3.2.1 Sources & uses of data.
   3.2.2 Types of data
   3.2.3 Collection & Presentation
3.3 Centering constants
   3.3.1 Measures of variation
   3.3.2 Normal, Binomial & Poisson distribution
   3.3.3 Concept of probability
3.4 Sampling methods
3.5 Test of significance
3.6 Correlation & regression
3.7 Clinical Trial
3.8 Statistical fallacies
3.9 Non-parametric tests
3.10 Statistical exercises
3.11 Operational research.
3.11 Vital statistics
3.11.1 Sources of vital statistics
3.11.2 Registration system
3.11.3 Definition & uses
3.11.4 Morbidity & mortality rates
3.11.5 Standardization of death rates
3.11.6 Life –table
3.11.7 Fertility rates

3.12 Use of computers & their application in Public Health.

4) Environment & Health –
Planning and management for provision of safe water

4.1 WATER
4.2. Water in relation of health & diseases
   4.2.1 Sources & uses
   4.2.2 Pollution
   4.2.3 Purification
      a) On large scale
         i) Storage
         ii) Filtration
         iii) Disinfection
      b) On small scale
         i) Household level
         ii) Disinfection of well
   4.2.4 Quality
      a) Criteria & standards
   4.2.5 Hardness of water
   4.2.6 Swimming pool sanitation
   4.2.7 Horrock’s apparatus
   4.2.8 Public health laboratory and its functions in this context

4.3 Air & health
   4.3.1 Indices of thermal comfort
   4.3.2 Pollution
      a) Sources
      b) Pollutants
      c) Monitoring
      d) Effects
      e) Prevention & control

4.4 Housing
   4.4.1 Social goal
   4.4.2 Standards
   4.4.3 Housing & health
   4.4.4 Overcrowding
   4.4.5 Indicators

4.5 Industrialization & health

4.6 Radiation & health
   4.6.1 Sources
   4.6.2 Types
   4.6.3 Units
   4.6.4 Biological effects
   4.6.5 Protection
4.7 Air temperature
   4.7.1 Measurement
   4.7.2 Effects of heat on human health
   4.7.3 Effects of cold on human health
   4.7.4 Global warming
4.8 Hazardous wastes & health
   4.8.1 Planning and management of safe disposal of solid waste
   4.8.2 Planning and management of safe disposal of bio-medical waste
4.9 Noise & health
   4.9.1 Sources
   4.9.2 Properties
   4.9.3 Effects
   4.9.4 Control
4.10 Safe Disposal of Municipal waste
   4.10.1 Liquid waste
   4.10.2 Solid Waste

5) Nutrition & health

5.1 Chemistry & physiology of food
5.2 Nutritive value of food & planning of balanced diet
5.3 Food processing & preservation
5.4 Nutritional problems
   5.4.1 LBW
   5.4.2 PEM
   5.4.3 Xerophthalmia
   5.4.4 Nutritional anaemia
   5.4.5 IDD
   5.4.6 Endemic fluorosis
5.5 Nutritional factors in selected diseases
5.6 Nutritional assessment
5.7 Nutritional surveillance & growth monitoring
5.8 Food hygiene- inspection & legal provisions
5.9 Food toxicants, food addition, food fortification, food adulteration
5.10 Food standards
5.11 National Nutrition Policy & Programmes
5.12 Applied aspects of nutrition (dietetics)
5.13 I.F.S.A. and BPMC acts in relation to prevention of food adulteration and various licencing procedure related to them

6) Epidemiology

6.1 Definition & aims
6.2 Epidemiological approach
6.3 Basic measurement in Epidemiology
6.4 Types of Epidemiological studies
   6.4.1 Observational
      a) Descriptive
      b) Analytic
   6.4.2 Experimental
6.5 Association & causation
6.6 Uses of Epidemiology
6.7 Infectious disease Epidemiology
6.8 Investigation of an epidemic of Leptospirosis, Malaria, Dengue in Urban set Up & in post disaster situations
6.9 Health advice to travelers
6.10 Disinfection
6.11 Control of hospital acquired infections
6.12 Screening for diseases

7) Microbiology
   7.1 General characteristics & morphology
   7.2 Laboratory techniques used in the study of microbial agents of public health importance.
   7.3 Collection & forwarding of different samples for bacteriological & serological analysis
   7.4 Serological reactions
   7.5 Immunity.

8) Protozoatology
   8.1 General characteristics
   8.2 Classification & Morphology
   8.3 Disease causation
   8.4 Laboratory techniques used in the study & control of protozoal infestations of public health importance.

9) Entomology
   9.1 General characteristics
   9.2 Classification & Morphology
   9.3 Bionomics
   9.4 Disease transmission & control of insects of public health importance.

10) Helminthology
    10.1 General characteristics
    10.2 Classification & Morphology
    10.3 Life cycle of helminthes
    10.4 Natural history of diseases
    10.5 Prevention & control of helminthes of public health importance.

11) Epidemiology of communicable diseases
    11.1 Exanthematous fevers
    11.2 Air borne infections
    11.3 Contact infections
    11.4 Water-borne & food borne disease
    11.5 Vector-borne diseases
    11.6 Zoonotic diseases
    11.7 Surface infections
    11.8 Emerging & re-emerging infectious diseases
    11.9 Hospital acquired infections
    11.10 National Health programmes for control/ elimination/ eradication of communicable diseases.

12) Epidemiology of non-communicable diseases
12.1 Cardiovascular diseases
12.2 Cancer
12.3 Diabetes mellitus
12.4 Disasters
12.5 Blindness
12.6 Accidents
12.7 Obesity.

13) Mental health
13.1 Health & diseases
13.2 Concept of
   a) Normality
   b) Mental health
13.3 Magnitude of the problem
13.4 Prevention of mental diseases
13.5 Alcohol related & drug related problems
13.6 Mental health services in India.

14) Geriatrics
14.1 Concept of Aging
14.2 Demographic scenario
14.3 Principles of underlying preventive geriatrics,
14.4 Preventive strategies for improving quality of life.

15) Reproductive & Child Health (RCH)
15.1 Introduction
   15.1.1 Mother & Child as one unit
15.2 Care of mother during
   15.2.1 Antenatal period
   15.2.2 Intranatal period
   15.2.3 Postnatal period
15.3 Care of children
   15.3.1 Neonatal care
   15.3.2 Care of infant
       a) Feeding of infants
       b) Immunization
15.4 Care of pre-school child
15.5 Growth & development
15.6 School health
15.7 Adolescent health
15.8 Indicators of RCH services
15.9 Reproductive & child health (RCH) Programme & services
15.10 Postpartum Programme
15.11 Family welfare programmes
15.12 Child labour.

16) Social sciences
16.1 Medical sociology
16.2 Social Anthropology
16.3 Introduction to social sciences & their application in public health.

17) Medical Ethics
18) Demography & Population Control
   18.1 Introduction
      19.1.1 Definition
      19.1.2 Demographic cycle
      19.1.3 Population Pyramid
   18.2 Fertility
      19.2.1 Factors affecting fertility
      19.2.2 Indicators of fertility
   18.3 Population explosion as a public health problem
   18.4 Approaches for population control.
      19.4.1 Family planning
         i) Definition
         j) Scope
         k) Health aspects
         l) Methods
            i) Spacing methods
            ii) Terminal methods
   18.5 Delivery system
   18.6 National family welfare programme

19) Occupational Health
   19.1 Definition
   19.2 Ergonomics
   19.3 Occupational diseases & their prevention
   19.4 Occupation related legislation
   19.5 Sickness absenteeism
   19.6 Social security
   19.7 Organization of services.

20) National Health Programme in India
   20.1 National Anti Malaria Programme
   20.2 Revised National Tuberculosis control Programme
   20.3 National Leprosy Elimination Programme
   20.4 National Filaria Control Programme
   20.5 National Family Welfare Programme
   20.6 Universal immunization Programme
   20.7 Reproductive & child health Programme
   20.8 ICDS
   20.9 National Programme for control of blindness
   20.10 National Cancer control Programme
   20.11 National water supply & sanitation Programme
   20.12 National mental health Programme
   20.13 National AIDS control Programme
   20.14 National Acute Diarrheal Disease control Programme
   20.15 National Iodine Deficiency Disorder control Programme

21) Health care delivery system
   21.1 Patterns of health care delivery
   21.2 History of development of health care delivery system in India
   21.3 Reports of different committees
21.4 Three-tier health care delivery system
   21.4.1 Primary health center
   21.4.2 Subcentre
   21.4.3 CHV
21.5 Urban health infrastructure.

22) Health management & health planning
   22.1 Definition
   22.2 Planning cycle
   22.3 Management methods & techniques (PERT, CPM)
   22.4 Personnel, financial & material management.
   22.5 Principles of planning of health services at district/ PHC level.
   22.6 Activity planning for epidemics, floods refugees
   22.7 Hospital Management.

23) Health Economics
   23.1 Basics of Health Economics
   23.2 Cost trends, Demand & Supply
   23.3 Price Elasticity
   23.4 Health Insurance
   23.5 Ginni Co efficient, Kankavani index

24) International Health & Telemedicine

25) Public health administration including relevant laws & Public Private Partnership
    like Chiranjivi Yojana, Baal Sakha yajana, EMRI

26) Health Education & Communication

27) Role of NGO in health care delivery system

28) Public Health Chemistry

Training Schedule:-

2 Years