

**One Year Diploma in  
EPIDEMIOLOGY AND PUBLIC HEALTH**

<b>PAPER-I EPH 101</b>	<b>EPIDEMIOLOGY OF NON-COMMUNICABLE DISEASES</b>	<b>FM-50 (Theory-40 + Internal-10)</b>
<b>PAPER-II EPH 102</b>	<b>EPIDEMIOLOGY OF COMMUNICABLE DISEASES</b>	<b>FM-50 (Theory-40 + Internal-10)</b>
<b>PAPER-III EPH 103</b>	<b>PUBLIC HEALTH</b>	<b>FM-50 (Theory-40 + Internal-10)</b>
<b>EPH104</b>	<b>COMMUNITY-BASED SURVEY WORK</b>	<b>50</b>

**Paper-I  
EPIDEMIOLOGY OF NON-COMMUNICABLE DISEASES**

**Paper Code- EPH 101**

**FM-50 (Theory-40 + Internal-10)**

**Class- 40 hrs**

1. Principle of Epidemiology. Its aims, approach, use of epidemiology, disease frequency, distribution & determination, tools of measurement in epidemiology, incidence & prevalence of disease. 5 hrs
2. Epidemiological method- Descriptive, Analytical, Experimental. 5 hrs
3. Screening for diseases. Concept of screening, uses of screening and criteria of screening, true positive, true negative, OR, sensitivity and specificity of test. 5 hrs
4. Epidemiology of chronic non-communicable diseases and condition. 1 hrs

5. Diabetes: Epidemiological determinants, screening for diabetes, management. 3 hrs
6. CVD & CHD, risk factors, intervention. 3 hrs
7. Rheumatic Heart Disease: Epidemiological factors. 3 hrs
8. Stroke risk factors, intervention & epidemiology. 2 hrs
9. Cancer: Epidemiology, risk factors, intervention. 3 hrs
10. NPCDCS: National Program for Prevention and Control of Cancer, Diabetes, CVD & Stroke. 3 hrs
11. National Program for Control of Blindness (NPCD)- Vision-2020. 3 hrs

## **PAPER-II**

**Paper Code- EPH 102**

### **EPIDEMIOLOGY OF COMMUNICABLE DISEASES**

**FM-50 (Theory-40 + Internal-10)**

**Class- 40 hrs**

1. Disease Transmission: Host Defense- Immunity, Vaccination, Cold Chain of Vaccine-Equipment of Cold Chain. Adverse Events of Immunization. Disease Prevention & Control-Controlling of Reservoir, Interruption of Transmission, Susceptible Host, Sterilization & Disinfection, Investigation of an Epidemic. *4 hrs*
2. Principle of Prevention and Control of Communicable Diseases: Barrier Nursing and Reverse Barrier Nursing, Subclinical Infection and Lateral Infection. *3 hrs*
3. Diarrhoea, Cholera and Food Poisoning. Epidemiology of Rota Virus Diarrhoea. HACCP (Hazard Analysis Critical Control Point). Groups, Biotypes and Serotypes of Vibrios Circulating in India. *4 hrs*
4. Enteric Fever, Poliomyelitis, Viral Hepatitis A & B. Epidemiology of Polio, Conquest on Polio, Phase-I, Phase-II, Polio Eradication, Oral Polio Vaccine and Injectable Polio Vaccine, tOPV, bOPV, VDPV (Vaccine Derived Polio Virus), Epidemiological Aspects of Hepatitis A & E, Immuno Prophylaxis of Hepatitis A. *4 hrs*
5. Acute Respiratory Infections: Epidemiology, Prevention & Control of Influenza-A-H<sub>1</sub>N<sub>1</sub>, H<sub>5</sub>N<sub>1</sub>, H<sub>7</sub>N<sub>9</sub>, Ebola and MERS-COV, DPT. *4 hrs*
6. Tuberculosis: Epidemiological Measure of Tuberculosis, Diagnosis of Tuberculosis, Preview of RNTCP, Management of MDR-TB Under DOTS, Plus Strategy, New Case, Relapse, Failure, Default and Cured in RNTCP. *4 hrs*
7. Vector-Borne Diseases: Epidemic of Malaria, Principle of Prevention and Control, Epidemiological Parameters Used to Assess Malaria Situation, Incubation Period and Communicability Period in Malaria. Relapse Resistance & Recrudescence in Respect to Malaria, EMCP (Enhance Malaria Control Program). Prevention and Control of Dengue, Epidemic of Dengue, Dengue Fever, Dengue Haemorrhagic Fever & Shock Syndrome. Surveillance for Dengue. Filariasis- Epidemiology, Prevention and Control, Chikungunya. *5 hrs*
8. HIV & AIDS: Policy & Procedure for Testing for HIV in Our Country. Social Factors for HIV Transmission. Principle & Prevention of Control of HIV/ AIDS. Probability Vs. Magnitude of HIV Transmission. Antiretroviral Therapy (ART) in HIV Positive Person. HAART (High Active ART). HIV Endemicity Level, Case Definition Vs. Expanded Case Definition for AIDS. Difference Between AIDS Related Complex (ARC) and AIDS. *5 hrs*

9. Zoonoses: Definition, Classification. Anthrax, Ebola Virus Disease (EVD), Rabies, Typhus-  
Epidemiological Aspects- Transmission, Prevention and Control. *4 hrs*

### **PAPER-III**

**Paper Code – EPH 103**

### **PUBLIC HEALTH**

**FM – 50 (Theory – 40 + Internal - 10)**

**Class - 40 hours**

1. Determinants of Health and Diseases – Nutritional Aspect, Environmental Aspect, Occupational Aspect. *2 hrs*
2. Disease Transmission: Dynamics Models, Host- Incubation Period, Generation Times, Secondary Attack. *2 hrs*
3. Epidemiological Triad Theory of Disease Causation. *4 hrs*
4. Risk Approach in Public Health, Risk Marker and Risk Indicators, Spectrum of Disease and Iceberg of Diseases, Isolation and Quarantine. *5 hrs*
5. Epidemiological Web Theory and Wheel Theory in Disease Causation. *4 hrs*
6. 'BEINGG' Model of Causation of Disease, Description of Terms – Control, Elimination, Regional Eradication, Eradication, Impairment Disability, Handicap, Disease, Illness, Sickness, Disability Limitation and Rehabilitation, Training of Epidemiology and Advanced Triangle of Epidemiology, Rate, Ratio of Disease, HDI. *6 hrs*
7. Indicators of Public Health: IMR, MMR, CMR  
Public Health Programme – Aims, Objectives, Indicators and Targets.  
Public Health Administration India, Planning Cycle in Health Care Programme Cost-Benefit Analysis, Cost-Effective Analysis, Input-Output Analysis, NET-WORK Analysis, Planning, Programming, Budgeting System, NHP – National Health Policy – 2017. Levels of Prevention of Disease, Tribal Health in India, Health Core System, International Health Agencies – WHO-, UNICEF, FAO, CARE, Red Cross. *6 hrs*
8. Millennium Development Goals (MDG) To Sustainable Development Goal (SDG). Health Information System (HIS), IEC in Public Health: Principle, Approaches, Barrier, Content of Health Education, Job Description of Member of Health Team. *6 hrs*
9. Monitoring and Evaluation of Health Programs. *5 hrs*

**PAPER-IV**

**Paper Code – EPH 104 (Practical)**

**Community-based survey work – 50**

**EPH 106 -Grand viva - 50**