

Passed by Academic Council (Resolution No. 355/2006) dtd. 30/05/2006,
subject to Uniformity in the Examination pattern.

Diploma in public health (DPH)

GOAL:

The overall goal of training programme is to produce a competent public health specialist who can function as a leader of health team and is able to provide effective health care at the primary, secondary and tertiary levels.

OBJECTIVE:

At the end of training programme a postgraduate student of DPH should be:

- A) Able to do community diagnosis and offer community treatment by designing / Organizing, Implementing and evaluating the health services.
- B) Competent to practice promotive, preventive, curative and rehabilitative medicine with respect to commonly encountered health problems.
- C) Learn every aspect of national policies, public health laws and various national health programmes on health and devote herself / himself to its practical implementation.
- D) Plan, establish and manage health care delivery at primary, secondary and tertiary level.
- E) Acquire managerial/ leadership skills in area of human resources, material and resource management related to health care delivery.
- F) Able to work as a leading partner in health care team and acquire proficiency in Participatory Learning for Action (PLA) techniques tools and be competent to work in a variety of health settings.
- G) Acquire the skill for teaching and training of undergraduates, interns and other health care workers.
- H) Develop scientific temper and possess the attitude for continued self learning by keeping abreast with latest advances in the field of public health and to seek further expertise and to pursue research in the field of public health.

SKILLS

Skills to be acquired by the DPH Candidates by the end of 2 years

A) Clinical Skills:

- Patient examination (Men, Women and Children)
- Immunization
- Simple Gynecological Examinations, treatment, referral.
- ANC examination and detecting high risk and referral.
- Under fives anthropocentric, assessment & referral.
- Cu. T insertion & removal
- AFB & grams staining of slides.
- Pap's smear collection and fixing slide.
- Collection of blood and conducting routine blood tests:- CBC, ESR, HB, MP
- Urine – Routine
- Chlorination of water

A) Organizational skills:-

- Community diagnosis
- Organizing community programme
- Communication of programme
- Leadership skills
- Implementation of programme
- Evaluation
- Disaster management and investigation of an epidemic
- Inspection of Hotel, industry, bakery and certification of the same.

COURSE CONTENTS (2 years course)

THEORY:

1. Environment in community health
2. History of public health in India
3. Concepts in Community health
4. Report of various health committees
5. Principles and levels of prevention

MICROBIOLOGY:

1. Microbes of public health importance including various and parasites
Morphology examination of milk and water
2. Bacteriology examination of milk and water Collection, transportation and lab diagnosis of microbes
3. Disinfection, sterilization and insecticide
4. Entomology
5. Immunology: Basic principles.

EPIDEMIOLOGY

1. Definition, concept, scope and objectives and functions
2. Measurements in Epidemiology
3. Association and causation
4. Disease transmission and principles of control
5. Analysis of descriptive study; time, place & personal characteristics
6. Studies in Epidemiology – Techniques and analysis
7. Epidemiology of communicable and non communicable diseases in India
8. General principles of investigation of an epidemic

EPIDEMIOLOGY SERVICES AT P.H.C.

1. Surveillance of communicable and non – communicable diseases.
Calculations of epidemic and endemic nature of diseases, seasonal index etc
2. Surveillance and impact of health services
3. Development of health information systems
4. Updating Epidemiological skills of peripheral worker
5. Investigation and control of epidemics.

NUTRITION

1. Social factors influencing nutrition
2. Nutrients
3. Nutritional requirements, nutritional deficiency
4. Balanced diet, Nutritional Assessments
5. Prevention of nutrition diseases
6. Nutritional programs and nutritional rehabilitation

OCCUPATIONAL HEALTH

1. Environment health hazards in industries
2. Health Hazards due to chemical and biological agents
3. Prevention of occupational diseases
4. Industrial psychology
5. Industrial health organization

PUBLIC HEALTH ADMINISTRATION

1. General administration at Centre, state and district Panchayat Raj
2. Principles of ganisation and administration
3. Health administration at state, Centre and Municipal Corporation
4. National health policy
5. National health programs and National Disease Control & Eradication Programmes
6. Primary health care in India
7. Planning and evaluation of programs
8. Management of motivating
9. Health care administrator – roles, tasks and functions
10. Management of motivation
11. Team concept and functioning
12. Management of district health services
 - a. Structure and function of or organization at district level
 - b. Role stress, case sheet
 - c. Community health diagnosis
 - d. Action plan analysis
 - e. Monitoring performances of P.H.C.
13. Mobilizing community resources and creating demand for services
14. Management of human resources
15. Management of supportive system, including man power planning and development system
16. Managing conflict and interpersonal behavior, and understanding inter personal behavior
17. Communication and coordination.
18. Office management
19. Finance, Material Management, Vehicle Management
20. Public health Laws.

SOCIOLOGY

1. Study of Society, Community, Culture
2. Family, marriages and other institutions
3. Socialization and social control
4. Social stratification
5. Social psychology, theories and learning
6. Motivation, incentives and dis incentives
7. Knowledge, attitude and practice – Assessment and influencing health and disease
8. Leadership – qualities, types, etc.

HEALTH EDUCATION AND INFORMATION, EDUCATION AND COMMUNICATION

1. Theories of learning
2. Communication
3. Principles and planning of health education
4. Methods and media

M.C.H. DEMOGRAPHY, FAMILY PLANNING, REPRODUCTIVE AND CHILD HEALTH

1. Principles of Antenatal, Intranatal and Postnatal Care
2. Domiciliary M. C. H. services
3. Growth and Development
4. Preschools and school health services
5. Indicators and evaluation of M.C.H. services
6. Child survival and safe motherhood
7. Reproductive health

MENTAL HEALTH

1. Mental health problem in India
2. National mental Health Problems

BIO STATISTICS

1. Statistics Methods: nature of data, Tabulation
2. Graphical representation of data
3. Sampling techniques, survey methods, calculation of various rates and ratio, standardization of rates, tests of significance
4. Health indicators: health information system
5. Demography and population statistics
6. Test of Significance
7. Survey methodology
8. Life table techniques

PRACTICALS:

I Microbiology applied to Public Health:

- (a) Hands on experience in staining techniques and its interpretation
 - (a.i.) Liehman
 - (a.ii.) Grams
 - (a.iii.) A.F.B.
 - (a.iv.) Alberts
 - (a.v.) Ziehl Neelsen
- b) Peripheral blood smears0 Thick and Thin, Staining and Reporting
- c) Interpretation of commonly used tests like Widal, HIV, HB, VDRL, Viral Antibody tires.
- d) Microscopic examination of stools and reporting
- e) Collection and dispatching of samples to Laboratory

II Environmental Sanitation:

- (a) Collection of water samples, analysis and interpretation
- (b) Study of requirement of water in Urban and Rural setting
- (c) Waste Management

III Medical Entomology:

- (a) Collection of insects of Medical importance
- (b) Hands on experience in mounting of specimens and reporting
- (c) Conduct entomological survey and report

IV Epidemiology and Statistics:

- (a) Exercises to illustrate principles and practice
- (b) Investigation of an outbreak of disease and measures to control

V Exercise in Public Health Administration (Problem Based)

- (a) Beneficiary need analysis
- (b) Preparation of an Annual plan
- (c) Budgeting at the P.H.C. Level
- (d) Supervision of vaccines, Medicines, Stationary etc., for a P.H.C.
- (e) Organization of F.W. Camp
- (f) Conduction of an immunization camp

VI Nutrition:

- (a) Nutritional assessment of a Community
- (b) Collection of food samples and dispatch

VII Study of environment and its influence of health in:

- (a) Work Place
- (b) Household
- (c) Community

VIII study visit to places like Market place, Slaughter house, Cinema, Hotel, Milk Dairy, Food and Beverages processing units and report

IX Family study – Urban and Rural

METHODOLOGY OF TRAINING

The following methods of learning will be adopted:-

1. Lecture cum discussion
2. Solving problem based exercises
3. Practical demonstrations
4. Community health survey
5. Study visits to places of public health importance and reporting
6. Investigation of an Epidemic
7. Evaluate any one of the national Health Programme and report
8. Undertake a small project work
9. Participation in Journal review meeting and presentation of Journal articles
10. Problem based learning

VISIT TO PLACES OF PUBLIC HEALTH IMPORTANCE

1. Haffkine Institute
2. Public Health Laboratory
3. Rehabilitation Centre
4. Blind School
5. Central Labour Institute
6. Worli Dairy Plant
7. Yoga Institute
8. Sewage Treatment Plant
9. Bhandup Water Filtration Plant
10. Bhabha Atomic Research Centre
11. Rehabilitation Centre
12. Family Welfare, Research & Training Centre

FIELD VISITS

P.H.C.	2 months
District level	15 days
Urban Health Centre	6 months
Infectious disease hospital	1 month
Municipal Corporation at MOH level	15 days
Pediatrics	1 month
M.C.H. Centre	15 days

PROJECT WORK

Project work consisting of planning, data collection, analysis and interpretation of results and discussion is mandatory for final certification for appearing for DPH exam.

MONITORING THE PROGRESS

Will be done by

- a) **Work Diary**
- b) **Logbook**

All records to be scrutinized periodically by the staff and head of the department. A score of more than 5 in all items in the scoring scale is mandatory for getting the final certification

EVALUATION

Scheme of Examination: (As per Direction No. 01/2008 dtd. 26/05/2008)

TEXT BOOKS AND OTHER REFERENCES

1. Maxcy Roseman John M. Last, Maxcy – Roseman Public Health and Preventive Medicine, Appleton – Century – Crofts, Newyork
2. Hobson W, The Theory and Practice of Public Health, Oxford Med. Publication
3. Barker D J P, Practical Epidemiology, Churchill Livingstone
4. Park J E & K. Park, Text Book of P & S. M., M/S Banarsidasm Bhanot
5. Mahajan B K and M.C. Gupta, Text Book of P & S.M., Jaypee Publications
6. Sir Austin Bradford Hill, Principles of Medical Statistics, The Lancet Ltd. No. 7 Adam Street, Adelphine, London, 1967
7. John J. Hanlon, Public Health Administration and Practice, MOSBY
8. Mac Mahon & Pugh, Epidemiology- Principles and Methods, Little Brown & Co. Boston, U.S.A.
9. Robert S. Godheart Mauliee E. Shills, Modern Nutrition in Health, K.M. Narghese & Co.
10. Mawner & Kramer, Epid: An Introductory Text. 1985, W.B. Saunders Co.
11. Hunters Diseases of Occupations; Edited by P.A.B. Raffle, P.H. Adams, P.J. Baxter and W.R. Lee Edward Arnold Publishers (1994), Great Britain.
12. Committee Report and policy documents- medical education and health policy:
 1. Bhore Committee Report (1946) Health Survey and Development Committee, Govt. of India, Delhi
 2. Mudaliar Committee Report (1961) Health Survey and Planning Committee, Govt. of India, Delhi.
 3. Shrivastav Report (1947), Health Services and Medical Education – A programme for immediate action, Group on Medical Education and Support Manpower, Ministry of Health and Family Welfare, Govt. of India, New Delhi.
 4. ICSSR/CMR (1981), Health for All – An alternative strategy – Report of a Joint study group of ICSSR / ICMR, Indian Institute of Education, Pune.
 5. National Health Policy, (1982) Ministry of Health and Family Welfare, Government of India, New Delhi.
 6. Compendium of Recommendations of various committees on Health and Development (1943 – 1975), Central Bureau of Health Intelligence (1985) Directorate General of Health Services, Ministry of Health and Family Planning, New Delhi.
 7. Bajaj, J.S. Etal (1990) Draft National Education Policy for Health Sciences, I.J.M.E., Vol 29, No. 1 & 2 (Jan – August 1990)

ADDITIONAL READING

1. Indian Council of Medical Research, "Policy Statement of Ethical considerations involved in Research on Human Subjects". 1982 I.C.M.R., New Delhi.
2. Code of Medical Ethics framed under section 33 of the Indian Medical Council Act, 1956. Medical Council of India, Kotla Road, New Delhi.
3. Francis C M Medical Ethics, J P Publications, Bangalore, 1993.
4. Indian National Science Academy, Guidelines for care and use of animals in Scientific Research, New Delhi, 1994.
5. Internal National Committee of Medical Journal Editors, Uniform requirements for manuscripts submitted to biomedical journals, N Engl J Med 1991 ; 424 – 8
6. Kirkwood B.R., Essentials to Medical Statistics, 1st Ed., Oxford: Blackwell Scientific Publications 1988.
7. Mahajan B.K., Methods in Bio statistics for medical students, 5th Ed. New Delhi, Jaypee Brothers Medical Publishers, 1989

Journals

1. Indian Journal of Community Medicine
2. Indian Journal of Public Health
3. Indian Journal of Community Health
4. Journal of Communicable Diseases
5. Indian Journal of Maternal & Child Health
6. Indian Journal of Preventive and Social Medicine.
7. Indian Journal of Occupational Health & Industrial Medicine
8. Indian Journal of Medical Research
9. National Medical Journal of India
10. Indian Journal of Malariology
11. Indian journal of Environmental Health
12. Indian journal of Medical Education
13. Indian journal of Medical Association
14. Indian journal of Medicine, Pediatrics, OBG, Skin& STD, Leprosy, Tuberculosis & Chest Diseases (For reference)

International journals

1. WHO Publications – All
2. Journal of Epidemiology & Community Health
3. Tropical Diseases Bulletin
4. Vaccine
5. American Journal of Public Health
6. Lancet
7. New England Journal of Medicine