

**Syllabus for Licensing Exam of
Post Graduate Diploma in Health Promotion & Education
2022**



Nepal Health Professional Council

Bansbari, Kathmandu

Content

S.N.	Topics	Marks
1	COMMUNICABLE DISEASES CONTROL	10%
2	HEALTH ADMINISTRATION AND ENVIRONMENTAL SANITATION	15%
3	MATERNAL CHILD HEALTH, NUTRITION AND HEALTH STATISTICS	20%
4	COMMUNITY ORGANIZATION AND DEVELOPMENT AND HEALTH EDUCATION	15%
5	BEHAVIOURAL SCIENCES & RESEARCH METHODOLOGY	20%
6	COMMUNICATION METHODS AND MEDIA	10%
7	NATIONAL HEALTH PROGRAMMES	10%
	Total	100%

1. Communicable Diseases control

BASCIS HUMAN ANATOMY AND PHYSIOLOGY:

Introduction to Anatomy and Physiology, Definition of Anatomy and Physiology Structure and functions of cells and tissues and systems: digestive system, musculoskeletal system, respiratory system, endocrine system, Circulatory system, lymphatic system, excretory system, reproductive system, nervous system

HELMINTHOLOGY AND MEDICAL ENTOMOLOGY

Types; characteristics; life cycle (hookworm, round worm, pinworm, tape worm, guinea worm, microfilaria, Arthropods of medical importance, classification, characteristics. Mosquito: types – life cycle of Anopheles, Culex, Diseases transmitted by these vectors and their control measures, Introduction of Fly, Flea, Mite, Louse and their life cycle – diseases transmitted by these vectors and their control measures, Sterilization, disinfection and disinfestations: definition and methods of sterilization, disinfection and disinfestations

EPIDEMIOLOGY

Concept and scope of epidemiology: definition – concept – uses in public health, Definition of Health and disease: , disease Continuum – Interaction between agent, host and environment – natural history of disease – definition of terms – epidemic, endemic, sporadic, pandemic, incubation period, reservoir, host, quarantine, and level of prevention, Communicable diseases: definition – reservoir and source of infection – mode of entry and exit of organisms – channels of transmission – susceptible host – definition of terms: case, carrier, contact, vector, vehicle, fomites, Classification of communicable diseases: caused by inhalation, ingestion, direct contact, inoculation – principles in control of those diseases and health education components. Occurrence – mode of spread –symptoms – prevention and control measures of chickenpox, measles, diphtheria, whooping cough, Tetanus, Cholera, Typhoid and paratyphoid, Diarrhea and Dysentery, Food poisoning, Poliomyelitis. Viral hepatitis, Helminthic infestations: hookworm, round worm, pinworm and tape worm, Malaria. Filariasis, Kala azar, Tuberculosis, Leprosy, Sexually Transmitted Diseases and AIDS. Common skin infections: Scabies, ringworm, Rabies, Plague, Trachoma and conjunctivitis, Epidemiology of no communicable diseases and other conditions: Cancer, Cardiovascular diseases, Diabetes, Goitre, Blindness, injuries.

INTRODUCTION TO MICROBIOLOGY

Historical development – role of microbiology in health and diseases., Bacteria: Definition – types – growth – spore formation – morphology – staining characteristics – viability, Viruses: Definition – types, Protozoa: Definition – types – life cycle – cyst formation, Corona Virus and COVID-19, Diseases caused by protozoa – amoebic dysentery, malaria, Fungi : Definition – types – diseases caused by fungi ringworm, Immunity: definition – concept and types of immunity – herd immunity and its importance in public health., Immunization: methods – schedules – storage – side effect – ant epidemic and international regulations.

OCCUPATIONAL HEALTH

Introduction : Basic concepts of occupational health and its components, Environment and industry: temperature humidity, air movement, and radiation; effective temperature, Industrial toxicology: smoke, dust, fumes, smog, vapour gas etc; toxic gases; metals and solvents; Modes of entry; safe limits, Occupational diseases: heat disorders; Vibrations, repetition of motions; excess noise; dust diseases, Measures for control of industrial health disorders, primary and

secondary (containment & ventilation), Accident prevention: Proper ventilation and personal protective devices. Factories Act; Industrial health services; The Child Labour (Prohibition and Regulation) Act, 2000, drinking water facilities, heating facilities; wash and locker room facilities; toilet facilities; restroom facilities, Health hazards in agricultures, Preventive measures and role of health education in occupational health.

2. HEALTH ADMINISTRATION AND ENVIRONMENTAL SANITATION

HEALTH PLAN

History of health services in Nepal, National health policy, Nepal health sector strategy, National periodic plans: health and nutrition; achievements, challenges,

HEALTH ORGANIZATION.

The Constitution of Nepal : Provisions for health: in constitution ; Health set up at federal level: Ministry of health and population at federal level, Department of health services and its division, centers, Province level set up, Ministry of social development, ministry of health, ministry of health and family welfare province level, Directorate of Health Services: and health offices at district level, Local level health unit, Role of Professional Health Educator, Role of other agencies and mobilization of community resources, National Health Policy – current trends, Primary Health Care – concept – approach & principle.

MANAGEMENT:

Principles of organization; behavioural approach; human factors; authority, power, managerial aspects applicable to health administration, Delegation of duty and authority, Staff functions, Communication principles applicable to management: techniques of communication: orders: manuals and guides, coordination, participation.

HEALTH MANAGEMENT INFORMATION SYSTEM

Supervision – goals and functions: leadership and supervision, Personnel management; minimizing of role conflicts. Morals and motivation of staff, personnel training, performance appraisal; utilization of man-power resources: team concept. Finances, budgeting, Material management, Public relations and reporting.

HEALTH LEGISLATION

Nepal public health service act 2075 and Public health-related laws: need and scope, Drug act 2035 BS, Prevention of food adulteration Act, Consumer Protection Act 2075 BS, Child marriage & provision on National criminal process code 2074, International health, the role of community participation in effective enforcement of these Laws.

INTERNATIONAL HEALTH:

International Agencies connected with Health, Interdependence in health, international health regulations – scope, objectives and functioning of WHO: Constitution, objectives, plans of operation: assistance, UNICEF: Constitution, objectives, functions, roles, various programmes, Other agencies like USAID, FAO, ILO, various health programmes in the country supported by these organization, professional organizations.

ENVIRONMENTAL HEALTH

Introduction to environment : Types of environment ; Components of environment : man and his environment, Environmental health problems in Nepal : Problems in relation to water – sewage, refuse, air, food, housing and public places, Environment and Health : Need for improvement of environment., Environmental sanitation in the National Plans: National schemes for improvement of environment, Environmental sanitation in the community development and health programmes in the Five Year Plans. Water and diseases: source of drinking water; diseases transmitted through water, Pollution and protection of water supply: Source of Pollution : methods of protection of water supply at source, in distribution, and during, Storage, Purification and disinfection of water: Methods of purification for domestic and community consumption, Disposal of waste water : Methods of disposal of waste water in rural areas, Diseases transmitted through excreta and channels of transmission, Sanitary latrine as a sanitation barrier: Requirements of a sanitary latrine : Types of sanitary latrines – pit – latrine, VIP latrine, bore hole latrine, bucket latrine, aqua privy, water seal latrine with septic tank disposal, chemical closet, water carriage system: advantages and disadvantages of each: role of health educator, Observation visit to sewage works. Demonstration of sanitary latrines, Collection of disposal of refuse: Nature of refuse: systems of refuse collection and transport: methods of refuse disposal: role of health education, Food Sanitation: Public health importance of food and milk sanitation: sources of contamination: measures of sanitation for food and milk: sanitation of slaughter house and markets, Sanitation of food establishments: Sanitation of premises: Preparation, storage and serving of food handlers role of health educator, Home sanitation and health: Relation between housing and health principles of healthful housing, Sanitation of public places: Health problems associated with places of public gathering : sanitation of fairs and festivals: sanitation of refuge camps: role of health educator, Control of insects and rodents and dog destruction: Control of flies and mosquitoes: Control of rodents and rat proofing: Destruction of stray dogs: Role of Health Educator.

3. MATERNAL CHILD HEALTH, NUTRITION AND HEALTH STATISTICS

HEALTH STATISTICS AND DEMOGRAPHY

Introduction to (i) theoretical and applied statistics special reference to health statistics – specification, estimation, testing of hypotheses and inference: (ii) Demography concepts, definitions, purpose and uses, Sources of health demographic data: Institutional records, health and morbidity surveys, PHC records, case cards, surveys, census, registration of vital events, sample registration; exercise; questionnaires and schedules, Presentation of health data: (i) classification and tabulation: (ii) graphic presentation of data, linear graph, bar-chart, pie-diagram, histogram, frequency polygon, age-pyramid etc. – exercises, Percentages, rates and ratios relations to fertility, mortality and morbidity; , Indicators of health, estimation of population, Measures of central tendency/location; mean, median, mode, quartiles and percentiles; exercises, Measures of variation/dispersion: range, standard deviation, variance, co-efficient of variation; Exercises, Basic concept of correlation and association, Sample surveys in health field, Application of statistical methods to specific problems concept of significance test – chisquare tests life tables, Population trends in the world and in Nepal, Population theories - Malthusian, Marxian and Demographic transition theories; their consequences – economic, social and health; serialization, migration and family planning., Factors influencing fertility, Principles in designing records and reports.

NUTRITION:

INDIVIDUAL AND PUBLIC HEALTH NUTRITION , Introduction to nutrition: scope and importance of nutrition in promotion of health: classification of foods, Basic elements of foods; proximate principles and protective foods, Factors influence nutrition, Nutrients required for a balanced

diet, Balanced diet for different age and sex groups, including vulnerable groups; planning a low cost balanced diet, dietary requirements for certain diseases and for convalescents, geriatric nutrition, EFFECT OF NUTRITION ON HEALTH, Problems of malnutrition common in Nepal and their prevention, Interaction of nutrition and infection, Food-borne diseases and food hygiene, IMPROVING THE NUTRITION STATUS OF THE COMMUNITY, Assessment of the nutrition status of the community; Nutrition and diet surveys, Changing food habits, Principles of nutrition education, Fortification and enrichment of foods and preservation of foods, Nutrient loss during storage, processing and cooking, Nutrition intervention programmes; role of national and international agencies; role of health educator.

REPRODUCTIVE AND CHILD HEALTH, FAMILY WELFARE

childhood morbidity and mortality, Maternal care: Components of maternal care; antenatal care; post-natal care; immunization in maternal care; nutrition in maternal care. Service available for maternal care at various levels, Child care: Components of child care; care of newborn; care of infant; 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, Problems in utilization of maternal and child health services – socio-economic factors, organizational factors – corrective measures required, Reproductive and child health – introduction and approaches – components. Identification of educational opportunities in various settings

FAMILY WELFARE

Concept of family welfare; Integrated approach to family welfare and MCH – need for small family size – economic, health, socio, psychological, ecologic and eugenic, Conventional methods of contraception: Classification of methods – mechanical devices, chemical contraceptives – natural methods – advantages and limitations of each method – services available, Intrauterine Devices: Development and types of IUD – mode of action, selection of suitable cases – method of insertion – follow up of cases – possible side effects – drop outs due to expulsion – services available, Oral contraceptive and methods of the future: Regimen and mode of action – Selection of suitable cases – follow up of cases – side effects – methods of the future – services available., Sterilization: Principles of sterilization; Vasectomy – selection and preparation of cases, method, instructions and follow up cases, re-anastomosis; Tubal ligation – selection of cases, method, instruction and follow up cases, re-anastomosis, Medical Termination of pregnancy: MTP in other countries and in Nepal-indications for MTP – methods, Services available and role of health educator providing moral support to cases, Infertility: Causes of infertility in the male and female; Need for investigation of both partners; services available, Educational programmes for family planning: Role of health educator in planning, conducting and evaluating educational programmes, special campaigns, intensive drives

SCHOOL HEALTH AND POPULATION EDUCATION

Introduction to school health program Importance of school health program – Development of school health and population education programmes in Nepal, Health appraisal: Nature of health appraisal – cumulative health record – role of health personnel, teachers and parents – educational opportunities in the process, health promoting school, Healthful school living: School sanitation including hostel sanitation – building, ventilation, lighting, seating, protected water supply, sanitary facilities. Promoting interpersonal relationships between teacher and pupil and among pupils – Games and recreation facilities – Child guidance – health counseling. Preventive and curative services in schools: School health clinic – Role of school health nurse in school health education – immunization – accident and emergency services – health of school personnel – health education opportunities in the process, Nutrition in school health programmes: Nutrition education – feeding programmes including mid-day meals – food sanitation, Curriculum planning for health and

population education: Need for and preparation of health and population education curriculum for different age groups; integration of health and population education in existing curriculum, role of school health nurse on school health, Teacher preparation for health and population education: Teacher's role and responsibilities in health appraisal, health instruction, and health and, nutrition services; curriculum analysis with special reference to health and population education

4. COMMUNITY ORGANIZATION AND DEVELOPMENT AND HEALTH EDUCATION

COMMUNITY ORGANISATION:

Nature, concepts of community work, meaning of community organization; Principles and process, Importance of community organization in health education, application in rural and urban communities Mobilizing the community for action: formation of committees: nature and functions; principles to be used for effective community work, Role of Health Education Specialist as a change agent in communication organization, Role of other agencies (Voluntary & Government) in the process of community organization. COMMUNITY DEVELOPMENT: Introduction, definition, philosophy and principles, CD as a process, programme, method and a movement; need for CD in Nepal, History of Community Development Programme in Nepal, Progress of community development in Nepal, Organizational set up and functions of community development at the federal, province, province and local levels. Role of health educator in community development programme. Critical review of community Development Programme in Nepal

HEALTH EDUCATION

Introduction to health education: concepts, objectives, philosophy, importance and need of health education in public health, Definition of Health education, Principles of health education, Underlying disciplines and theories of health education, Ethics of the health education profession and attributes of the health education specialist, The role of the health education specialist in relation to other health personnel, Developing health education components in different programmes, Role of health education in the process of social change :PROGRAMME PLANNING. Concepts, principles and process of programme planning and educational process, Steps of programme planning, Community diagnosis, identifying needs and problems, facilitators and barriers for action programme, Framing objectives, overall and specific. TRAINING AND EDUCATIONAL METHODS: Training – definition, concepts, differentiation between education and training, administrative considerations in training, Training process: some conceptual models, functions of training, training strategy; establishing and defining training goals, principles and steps in curriculum development

TRAINING AND EDUCATIONAL METHODS

Training – definition, concepts, differentiation between education and training, administrative considerations in training, Training process: some conceptual models, functions of training, training strategy; establishing and defining training goals, principles and steps in curriculum development . Introduction to teaching learning methods. Advantages and limitations, principles to be followed in using different methods in appropriate situations. Methods to be discussed: lecture, group discussion, buzz group, problem solving, brain storming, demonstration, symposium, panel discussion, base study, role play, programmed instruction, colloquy, dialogue, workshop, seminar, Evaluation of teaching learning methods, Lesson plan: components, principles and steps in preparation of lesson plan, Field Training: concepts and importance and objectives. Field training strategy – steps in organization of field training, Training evaluation: Need, importance, principles and procedures. Various aspects of training. Health Training institutes at federal and province level

PROGRAMME MONITORING AND EVALUATION

Definition, purpose, type and place of evaluation in Health, concepts, principles and assumptions underlying evaluation, Monitoring: Definition, process and procedures, Management Information System, Monitoring as a process for programme development, Process of evaluation, defining objectives, deciding about indices of measurement and criteria of effectiveness. Steps in designing evaluation, Designing and application of tools and techniques of evaluation and interpretation, Analysis of data and interpretation,

5. BEHAVIOURAL SCIENCES & RESEARCH METHODOLOGY

BEHAVIOURAL SCIENCE IN RELATION TO HEALTH EDUCATION

Introduction to behavioral sciences: Definitions, nature, scope, limitations and their relevance to health behaviour – contributions of sociology, social psychology, socio-cultural anthropology. Cultural basis of health behaviour: Culture – definition with special explanations of terms such as knowledge, beliefs, norms, values, Folkways, morals (Mores), taboos, habits, traditions, customs, religion, superstitions and types, characteristics and determinants of culture, Social bases of health behaviour: Society, community, social/community structure, leaders, leadership, group dynamics, family type, kinship, social stratification, social deviance; social support, social influence, social processes, Civilization, Socio-psychological bases of health behaviour: Behaviour – definition, formation, perception, attention, learning process, socialization, values, personality development, (Sigmund Freud) attitudes, status and roles – Motives, drives and needs, decision making process, motivation – Process factors, theories –, Skinner, Gestalt, Maslov, Force Field theory, Rosenstock Green; Herzberg – Two factor theory. Factors That impede or promote health behaviour. Cultural change: Traits, diffusion, enculturation, acculturation, assimilation, adoption processes, invention, innovation and discovery, factors influencing. Social Change: Social, physical and technological change, Planned change: Nature, scope, stages, strategy, Need & importance. Risk communication

GROUP DYNAMICS

Introduction to group dynamics: objectives, purposes and norms to be followed. Skills and knowledge of group dynamics, Participation: Factors that affect participation of members in a group. Learn how to learn, Relationship of individual and the group: Personal needs and group membership. Individuality and group influence and groups on the formation of norms and attitudes, Leadership and group performance: Leader and group structure., Situational factors affecting leadership – Function of leaders, Task and emotional levels of functions in affecting relation to group development and productivity. Factors affecting participation of individuals. Personal factors in selection and assimilation of group roles, group productivity, Differentiation of roles in task-oriented group; Group building roles, Group maintenance roles, Individual roles, Roles related to group structure and functions: Chairmanship, recorder, observer, group members, Communication patterns in task-oriented groups; communication as a) interaction b) reciprocal c) expression. Situational factors in communication, Diagnosing group needs: Identifying and solving group problems: dealing with conflict and rejection in groups. Hidden agenda, Decision making in groups. The process of decision making in small groups. Leader-member responsibilities in the process of decision making.

MENTAL HEALTH:

Concept of mental health – relation between mind and body; Individual and community, Criteria of health (normal) and unhealthy (abnormal) mind, Mechanisms of adjustment needs: physical, social

& psychological, some specific areas of mental health concern; ageing (geriatrics), delinquency and criminality, sub normality, suicide, neurosis, psychosomatic illnesses, Causes of mental / behaviour disorders; heredity vs. environment, Prevention of mental disorders and rehabilitation of mentally ill. Mental deficiency: causes and remedies, Community mental health and National Mental Health Programme, Role of health educator in the field of mental health working with the Government and NGO groups, Behavioural problems of children, types, causes and remedies, Drug dependence – Drug De-Addiction and Alcoholism, Tobacco use

RESEARCH METHODOLOGY IN BEHAVIOURAL SCIENCES AS APPLIED TO HEALTH EDUCATION:

Definition and scope of social research in health education and health promotion, Preparation of research proposal: Overview on research process and steps, Critical review of relevant research and studies, Formulation of objectives and hypotheses, Independent, dependent and intervening variables, Types of studies; - Exploratory, descriptive, diagnostic, experimental, evaluative, cohort, epidemiological, cross-sectional and longitudinal (retrospective & perspective), Surveys and steps in data collection techniques, Types of data, sources, utilization and limitations, Method of collection of data – Observations, socio-metric, interviews, records and reports, questionnaires and schedules and projective techniques, case studies, focus group discussions, Development of instruments, Analysis of data – preparation of dummy tables, classification, analysis, tabulation and interpretation of data, Report-writing and presentation,

PROGRAMME MONITORING AND EVALUATION :

Definition, purpose, type and place of evaluation, concepts, principles and assumptions underlying evaluation, Monitoring : Definition, process and procedures, Management Information System – Monitoring as a process for programme development, Process of evaluation, defining objectives, deciding about indices of measurement and criteria of effectiveness, Steps in designing evaluation. Designing and application of tools and techniques of evaluation and interpretation, Analysis of data and interpretation, Four laboratory sessions of 3 hours each on, Operationalizing the definitions, Selection of indices, Development of tools, Working out evaluation on selected aspects of a programme,

6. COMMUNICATION METHODS AND MEDIA

COMMUNICATION PROCESS

Communication: definition, process, its application in health education, Models – different models of communication process, Communication: Theories and principles, Factors influencing communication – positive and negative, Channels of communication, Rumour : concept and tracking and addressing the rumour, Social and Behaviour change communication.

MASS COMMUNICATION

Definition – uses, Basic model of communication applied to mass communication, Essential elements of mass communication , Mass psychology – audience, crowd and mob, Mass communication in the context of ‘structures’ and ‘frame of reference’, Mass communication – source credibility, public opinion, publicity and propaganda, Mass communication and the receiver’s selective perception and retention, Mass communication media as a social instrument, Mass communication methods and media and their use in health education. MEDIA – definition, classifications, Process of preparation – principles and steps in preparation of aids – Pretesting, Steps in using the materials – selection, planning, using and evaluation of aids, Printed materials – Steps and principles involved – preparation and pretesting of printed materials such as folders,

handbills – script- writing, production process, Projected aids: definition – role of projected materials in health education – advantages – limitations. Steps and principles in planning projected aids such as filmstrip, slide and transparency. Preparation of handmade slides – how to use film strip / slide projector and motion film projector, Non projected aids: definition, scope and use, Graphic aids: definition – advantages – limitations – steps and principles in preparation and use of flash cards, posters, chart, graphs and printed materials such as leaflet, pamphlet, Display boards: definition, advantages, limitations – steps and principles in using blackboard, flannel board, bulletin board, preparation of flannel cut outs, Three dimensional aids: definition – role – advantages – limitations, Traditional media: definition – principles in preparation and use of puppets – folk songs – drama – folk dance, Exhibition: definition – principles of planning and designing visualization – planning an exhibition – techniques of evaluation.

EDUCATIONAL METHODS

Introduction to teaching learning methods. Advantages and limitations, principles to be followed in using different methods in appropriate situations. Methods to be discussed: lecture, group discussion, buzz group, problem solving, brain storming, demonstration, symposium, panel discussion, base study, role play, programmed instruction, colloquy, dialogue, workshop, seminar.

7. NATIONAL HEALTH PROGRAMMES

National health policies, strategies and Programs

National Malaria Elimination programme, National Lymphatic Filariasis control programme, National Tuberculosis Control Programme, Diarrhoeal disease control programme, Iodine deficiency control Program, Dengue control program, National programme for Eye Care, EWARS, National Tobacco Control Program, National water sanitation and hygiene programme, National immunization programme, National STD/AIDS control program, National Safer Motherhood program, National Adolescent Sexual and Reproductive Health program, Kala-azar program, Bipanna Nagarik Aushadhi Upachar, FCHV program, Family planning and reproductive health program, Noncommunicable disease control program, Health Promotion and national health education and information program