

DETAILED SYLLABUS FOR THE POST OF ASSISTANT PROFESSOR IN  
NURSING IN MEDICAL EDUCATION  
(Cat.No. : 692/2025, 693/2025)

(Total Marks - 100)

**Module I - FOUNDATIONS OF NURSING (10 Marks)**

Health -Illness Concept ; Health care and Nursing care concepts; Current trends and concepts in health and Nursing; Nursing as a profession; Code of ethics, Professional conduct for Nurses; Ethical and Legal issues in nursing; Nursing process, Nursing theories, Evidence based nursing practice.

Quality patient care, comprehensive care , Holistic nursing; Quality assurance in nursing; communication & IPR; Admission, discharge, transfer, referral, DAMA of Patients; Nurses Responsibilities in meeting Nutritional, therapeutic, hygienic, eliminational, physical/ psychological, rehabilitative needs. Administration of medications, injections, infusions, blood and products administration; care of Terminally ill patients, Palliative care, Hospice ; FIRST AID ; Communication and Nurse - patient Relationship.

Infection control practices and waste management; Documentation and reporting; Hospital Management information system.

**NUTRITION** : Nutritional Needs of different age groups including infants, children, adolescents, pregnant and lactating mother; special groups; Balanced diet, Nutritional programmes; Requirements of vitamins and minerals, CHO, protein, fat, water.

**HEALTH EDUCATION** : Communication, Counseling techniques, Principles, Methods and Media for health Education, A.V Aids, IEC, Advocacy, Management information system.

**Module I A**

**(5 Marks)**

**Biological Sciences - Anatomy, Physiology, Microbiology**

**Anatomy and Physiology**

**Human Cell** - Structure and Functions, Tissues and Glands:- Classification, Structure and functions.

**Blood** - Composition, Cellular Components, groups, functions, homeostasis

**Skeletal System** - Bones & Joints - types, classification, formation of bones

**Muscular Systems** - Types and structure of muscles, muscles of different parts of body

### **Circulatory and lymphatic system**

Structure of Heart, blood vessels, cardiac output; circulation - systemic, pulmonary, portal, components of lymphatic system, lymphoid organs, spleen, thymus

### **Respiratory System**

Parts of the respiratory system - air passages, lungs, muscles of respiration, physiology of respiration, exchange of gases.

### **Digestive Systems**

Parts of digestive system, accessory organs of digestion, process of digestion, hormones.

### **Excretory Systems**

Parts and Structure of organs of urinary System, Physiology of urine formation, micturition.

### **Reproductive System**

Structure and physiology of female reproductive organs, Structure of breast, Structure and physiology of male reproductive organs.

### **Nervous System**

Structure of neurones, neuroglia, reflexes, synapse, Central nervous system and Autonomic nervous system - Parts, Structure and Blood supply - brain & spinal cord.

**Endocrine system** - endocrine glands and their hormones

### **Sens Organs**

**Skin** - structure and functions, appendages and receptors, temperature regulation

**Eye** - structure, layers, muscles of eye ball, innervation, visual process

**Ear** - parts, physiology of hearing, ear balance

**Nose** - mechanism of sense of smell or olfaction

**Tongue** - structure, location of taste buds

### **Microbiology**

**Microbes** - General characteristics, structure and classification, Morphological types blood and body fluids Culture / transport media.

**Laboratory methods** of identification of microorganism

**Infection Control** - infection: source, chain of infection, types of transmission

**Asepsis** - Types, Disinfection; types and methods, Sterilization, Standard safety measures,

**Biomedical waste management**- Role of nurse in Disinfection, Sterilization, Standard safety measures, biomedical waste management.

**Hospital acquired infection** - Hospital infection control program, protocols Collection and transportation of samples

**Pathogenic organisms** - Cocci, Bacilli, Viruses, Fungi, Parasites, Nematodes and Rodents & vectors - types, features and diseases caused by them and its treatment.

**Immunity** - types, Antigen antibody reaction, hypersensitivity - skin test, Serological tests

**Immuno prophylaxis** - Vaccines & sera - types & classification, storage and handling, cold chain Immunization for various diseases, Immunization schedule, Newly available vaccines.

## **Module II- MEDICAL SURGICAL NURSING (15 Marks)**

Nursing management of patient with Fluid- electrolyte imbalance, Acid Base imbalance,, pain, Unconsciousness, terminal illness, CVA, DM, Epilepsy, Brain tumors, Spinal cord injury, traumatic brain, abdominal injury, Degenerative diseases, Neurological infections; Diagnostic measures/procedures and management of diseases related to Respiratory, cardiovascular and thoracic, GIT, Neurological , Neuro surgical , Renal, Urogenital, musculoskeletal, Endocrine, Eye, ENT, Diseases, Hematological, Immunological, Communicable diseases.

Medical, surgical Emergencies, snakebite, Poisoning, Hypersensitive reactions, Pre and post operative management of diseases affecting above systems;

Geriatrics- age related changes of each system, Health problems and management, social support systems for elderly; Miscellaneous - management of patients with problems of Breast, thyroid, Burns, polytrauma.

Critical care nursing -concept, policies, protocols, standards, ABG Analysis; Hemodynamic monitoring, Ventilator management, monitors, pacemakers, Cardiac surgery, management before, after and rehabilitation; BLS, ACLS, emergency equipments, uses and management; Role of Nurse.

## **Module III - NURSING EDUCATION ( 10 Marks)**

Principles of Education, educational philosophies, current trends in Nursing education, Teaching- learning process, laws of learning, principles of teaching, Maxims of teaching, factors influencing learning,; Concepts, principles and steps in curriculum planning and development, Course planning, unit, lesson, planning; Methods of Teaching, educational media, Evaluation and Assessment-Qualities of an evaluation tool, Principles of evaluation, ,test construction; Essay, short answer, multiple choice , OSCE, Attitude scales, Practical and viva.

Management of school of nursing - planning and organization, recruitment of teaching staff, budget, selection and admission, administrative planning, INC guidelines for School of Nursing.

Guidance and counseling; In-service Education.

### **Module IV-Obstetrics and Gynecological Nursing (10 Marks)**

Anatomy and Physiology of female reproductive system – female pelvis, internal genital organs and their anatomical relations, conception and fetal development, , fetal circulation,, developmental defects, factors influencing growth and development; genetic counseling, ; assessment and management of pregnancy, physiological changes in pregnancy; fetal assessment. Antenatal assessment; management of woman in antenatal, intranatal, post natal period. High risk pregnancy and management; abnormal labour - assessment & management, abnormalities during post natal period & management, Pharmacotherapeutics in obstetrics.

Family welfare programme, vital statistics; MTP ACT, Essential newborn care and management of LBW babies, Resuscitation, management of obstetric emergencies; Infertility ; Management of gynecological problems.

### **Module V-CHILD HEALTH NURSING ( 10 Marks)**

Concepts of Child care, National policy and legislations in Child health and welfare, Child welfare programme; preventive paediatrics, principles of growth and development.

Nutritional needs and care of children with nutritional disorders; nursing care of a Neonate; children; Management in medical and surgical conditions respiratory disorders and infections, GI disorders, Cardiovascular disorders, , Genitourinary disorders, neurological infections and disorders. Haematological and endocrine disorders, communicable diseases, Eye ENT disorders,, Management in emergencies ; Care of Challenged children; Management in Nutritional deficiencies; congenital defects; seizure; Behavioral disorders; Immunization; CPR.

### **Module VI-MENTAL HEALTH NURSING (10 Marks)**

Current trends in Mental health nursing, Role of Mental health Nurse, Concepts of normal and abnormal behavior; principles and concepts of Mental health Nursing, classification of Mental disorders, , Assessment of Mental health status, , Therapeutic communication and Nurse- patient relationship.

Treatment modalities and therapies used in mental disorders; management of patients with Schizophrenia, Mood( Affective Disorders), Neurotic, Stress related, Somatoform disorders, Behavioral disorders, Adolescent disorders; organic mental disorders, Psychiatric Emergencies, Adult personality disorders, Legal issues in mental Health Nursing.

Community Mental Health Nursing; Rights of Mentally ill clients; Defense mechanisms, structure and function of brain, limbic system and abnormal neurotransmission, OCD, Phobias, Post traumatic stress disorder, stress Adaptation and coping; National mental health programmes.

### **Module VII- COMMUNITY HEALTH NURSING (10 Marks)**

Levels of prevention, Protective health,; Environmental Health; Primary Health care; Epidemiology; Nursing Management of common communicable diseases-Resp. infections, Intestinal infections, Arthropod infections, zoonosesviral, Bacterial, Rickettsial , parasitic infections, zoonoses, HIV/ AIDS, Emerging Reemerging infections; Non communicable diseases, population control; IEC .

Concept of Community Health Nursing, Principles, Approaches , Roles and Responsibilities of Community Health Nurse; Various Health Committees; Health problems in India; Components of Health Services & Responsibility of Nurse Family Health services; health planning, policies and problems; Delivery of health care in India.

Community health services; National Health programmes & Role of Nurse; Public Health Administration.

### **Module VIII- MANAGEMENT OF NURSING SERVICE AND EDUCATION (10 Marks)**

Management in Nursing- Concepts, theories, Principles; Nurse manager, Management process – POSDCORB; Principles and practice of Nursing Administration; Management of Nursing Unit; Management of nursing service department- Nursing service unit, Hospital & Patient care Unit; Role of head Nurse in ward management; personnel management; Leadership; Motivation; Communication; Supervision.

Organizational behavior and Human Relations, Group dynamics; Public relations; Controlling- Quality Assurance, TQM, PERT, BENCH Marking, GANTT CHART; Budgeting, ; Material Management, Documentation & Reporting; Management of Nursing Service Department; Nursing Audit; Inservice Education; Nursing As a

Profession.

Management of Nursing Educational Institutions; INC Norms; Management of faculty, Selection, Recruitment, Orientation programme, job description, specification, staff

**Module IX-DEVELOPMENT AND WELFARE (5 Marks)**

performance appraisal; Administration of students; Administration of curriculum; Professional advancement.

RESEARCH : Research process, Research problem/ Question; Review of Literature; Research Approaches and designs; Sampling and data collection, Validity and reliability of instruments;

**Module X-PSYCHOLOGY & SOCIOLOGY (5 Marks)**

Mind & Body relationship, Cognitive processes- Attention, perception , Errors; Learning; Memory, forgetting; thinking;; Intelligence; Aptitude; Motivation; Emotions, & stress , psychometric assessment; Personality & Attitude; Mental hygiene & Mental health, - Role of nurse in maintaining mental health;psychological assessment tests;Sociology : Individual & Society; Culture & Socialization; Social process; family problems; Communities in India; Community development programmes, urbanization and problems; Social change; Social organization , Disorganization; social problems.

**NOTE:** It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.