

**DETAILED SYLLABUS FOR THE POST OF  
STAFF NURSE GRADE II  
MEDICAL EDUCATION  
(Category No: 213/2021)**

**MODULE - 1**

**BEHAVIOURAL SCIENCES**

**1. ANATOMY & PHYSIOLOGY**

Anatomical terms

Circulatory System - Structure & function of heart and blood vessels

Lymphatic System - Structure and function of lymph vessels, lymph circulation and lymphatic tissues -spleen and thymus.

Respiratory System - Structure and function of respiratory organs and characteristics of normal respiration and deviation

Digestive System - Structure and function of alimentary tract

Excretory System - Structure and function of kidney, formation and composition of urine, fluid and electrolyte balance

Endocrine System - Structure and function of thyroid, parathyroid, pituitary, adrenal gland and pancreas

Reproductive System - Structure and function of male and female reproductive system, Structure and function of breast and Reproductive health.

Nervous System - Structure and function of brain, cranial nerves, spinal cord, motor and sensory pathways of spinal cord and autonomic nervous system.

Sense organs - Skin, eye, ear, nose and tongue. Physiology of vision, hearing, smell, touch, taste and equilibrium.

Skeletal & Muscular System - Formation and growth of bones, tendons, ligaments and cartilages, classification of bones, axial and appendicular skeleton. Structure and function of muscle

**2. MICROBIOLOGY**

- History of bacteriology and microbiology, types of microorganisms, normal flora of body, pathogenesis and common diseases, culture and isolation of microbes.
- Sources and types of infection, factors affecting growth of microbes, cycle of transmission of infection, reaction of body to infection, mechanism of resistance and collection of specimen.
- Society – definition, social groups-types, structures, intergroup relationship, group cycle, group behaviour and group morale.
- Social change – factors affecting and effect on society and institution leading to social problems.
- Social control, social stratification, social problems – prostitution, crime divorce, dowry system, juvenile delinquency, drug addiction, alcoholism, handicapped, over population and slum.
- Social agencies and remedial measures.
- Culture and characteristics of community – definition, rural and urban, cultural and characteristics.

## **MODULE II**

### **BEHAVIOURAL SCIENCES**

#### **PSYCHOLOGY**

- Concept, scope and significance of psychology for nurses.
- Structure of mind – conscious, preconscious ,id, ego and super ego.
- Psychology of human behaviour, concept of mental health – Basic human needs, dynamics of behaviour, motivation of drives. body mind relationship, mental health.
- Mental mechanisms – uses and importance. Attitudes- meaning, development, changes in attitude, effects of attitude on behaviour, importance of positive attitude for nurse.
- Habits – meaning and formation, breaking of bad habits, importance of good habit formation for the nurse.
- Learning – nature, types, laws of learning, factors affecting learning, memory and forgetting.
- Thinking and Reasoning – nature and types of thinking, reasoning, problem solving, importance of creative thinking for nurse.
- Observation and Perception – Attention, perception, laws of perception, factors affecting attention and perception, errors in perception.

- Concept and development of personality, assessment of personality, characteristics of various age groups, will and character.
- Nature and measurement of intelligence, mental ability, nature of intelligence and development. Individual difference in intelligence.

## SOCIOLOGY

- Nature, scope and significance of sociology in nursing
- Socialisation process, influence of environment on individual development, rights and responsibilities of individual in society- socialisation process, effect of environment on human growth and development.
- Concept, characteristics and type of family, family cycle and basic needs of family, functions of family, importance of interdependence of family members, important functions of family and their problems. and problems, types of marriage, medical and sociology aspects of marriage.

## **MODULE III**

### **FUNDAMENTALS OF NURSING**

- Concept, scope, ethics and principles of nursing, history of nursing in India, health care agencies
- Holistic approach in nursing, determinants of health, effects of illness
- Therapeutic Environment-physical, psychological and aesthetic factors, prevention of environmental hazard
- Patient's adjustment to hospital-person, socio-economic and cultural background
- Admission, transfer and discharge procedures
- Basic nursing skills-Communication, interview, recording and reporting
- Nursing process-assessment, diagnosis, planning, implementation and evaluation
- Meeting the basic needs of patient- Physical needs, hygienic needs, elimination needs, nutritional needs, psychological and spiritual needs. Diversional and recreational therapy, care of terminally ill and dying patient.
- Assessment of patient – Physical, physiological and psychological assessment.
- Infection control methods – nature and type of infection, chain of infection transmission,

- Medical and surgical asepsis, isolation precaution, barrier nursing, hand washing, isolation, personal protective equipment, its uses, types, techniques of wearing and removing. transportation of infected patient.
- Biomedical waste management-importance, types, hazards, decontamination of hospital waste, segregation and transportation and disposal.
- Therapeutic nursing care-Care of patient with respiratory problem, altered body temperature, fluid electrolyte imbalance, body elimination deviation, care of unconscious patient, bed ridden patient and care of patients with pain.
- Clinical Pharmacology - Principles, routes, effects and storage of medications, medication errors, Broad classification of drugs, systems of drug measurements, dosage calculations, terminologies and abbreviations used in the prescription of medications. Oral and parenteral therapies, advanced techniques epidural, intrathecal, intraosseous, intraperitoneal, intrapleural, intraarterial. Topical administration, direct applications, inhalations, recording and reporting of medications administered.

### **FIRST AID**

- Importance and principles of first aid, Procedures and techniques in first aid, Transportation of the injured, CPR
- First aid in emergencies - asphyxia, drowning, shock, wounds and bleeding, Injuries to the bones, joints and muscles, fractures, sprains, strains, hanging, falls.
- Burns and scalds, poisoning-ingestion, inhalation, bites and stings.
- Foreign body in eye, ear, nose and throat.
- Various community emergencies and community resources - fire, explosions, floods, earthquakes, Role of nurse in disaster management, Rehabilitation.
- Community resources-Police, Ambulance services, Voluntary agencies - local, state, national and international.

## **MODULE 1V**

### **COMMUNITY HEALTH NURSING**

- Concept of health and disease, Primary health care, Promotion and maintenance of health.
- Philosoph, goals, objectives, principles, concept and importance of community health nursing, qualities and functions of community health nurse, steps of nursing process.
- Health system in India, health care delivery system, health planning in India.
- National health and family welfare programmes, major health problems in India.
- Specialized community health services and nurses role.
- Concept and function of health team, Role of nursing personnel at various levels.
- Health information system, health agencies-International and national.
- Health assessment of infant, preschool, school going, adolescent, adult, antenatal, postnatal women and elderly.
- Principles and uses of epidemiology, levels of prevention f disease, disease transmission, immunization, control of infectious disease.
- Family health services, family health goals, purposes and principles of home visits, bag technique, referral system.
- Records and reports, types and its uses, preparation and maintenance.
- Management of minor ailments.

### **NUTRITION**

- Classification of foods,Normal dietary requirement,balanced diet,diseases and disorders caused by the imbalance of nutrients.food intolerance-inborn errors of metabolism.
- Various methods of food preparation,preservation and storage.
- Therapeutic diet- Diet modifications in relation to the medical and surgical conditions.
- Special diet- low sodium,fat free,iron rich,low protein,high protein,high caloric,geriatric diet,diabetic diet,bland diet.high fibre,liquid diet,semi-solid and soft diet.
- Nutritional programmes and problems in India.

## **MODULE V**

### **MEDICAL SURGICAL NURSING**

- Pathophysiological mechanism of disease, altered immune response, autoimmune diseases
- Fluid electrolyte imbalance, operation room technique, management of patient undergoing surgery - preoperative, Intraoperative and post operative.
- Management of patients with impaired respiratory function, GI disorders, metabolic and endocrinal disorders, renal and urinary disorders, neurological disorders and connective tissue and collagen disorders.
- Nursing management of elderly.
- Prevention, screening, early detection, warning signs of cancer.
- Epidemiology, etiology, classification, pathophysiology, staging ,clinical features, diagnosis, treatment modalities of oncological conditions.
- Oncological emergencies, treatment modalities- immunotherapy, radiotherapy, surgical intervention, stem cell therapy, bone marrow transplantation, gene therapy and other forms of therapy.
- Psychosocial aspects of cancer, rehabilitation, palliative care, drugs used in cancer
- Medical, surgical and nursing management of patients with burns, breast disorders, integumentary disorders
- Plastic and reconstructive surgery, skin graft flaps, complications, preparation of patient for constructive surgery, postoperative care and health education.
- Management of patients with ophthalmic conditions, Preventive and rehabilitative aspects, National programs on blindness, Ocular emergencies, Eye banking, eye irrigations, eye dressing and bandage, assisting for removal of foreign body.
- Management of patients with ear,nose and throat disorders. cardiovascular, circulatory and haematological disorders and communicable diseases.
- Management of patients with sexually transmitted diseases and musculoskeletal disorders.
- Role of nurse in medical and surgical emergencies - scope and practice of emergency nursing, principles of emergency care, triage, airway obstruction, hemorrhage, shock.
- Trauma- intraabdominal, crush injuries, multiple injures, fractures,
- Poisoning- ingested, inhaled, food poisoning, injected poisons - stinging insects, snake bite, chemical burns,
- Environmental emergencies - heat stroke, snake bite, drowning, hanging.

- Role of nurse in emergency and disaster nursing-natural and manmade, emergency preparedness, community resources.

## **MODULE V1**

### **MENTAL HEALTH NURSING**

- Concept of mental health and mental illness, Principles of mental health nursing.
- History and trend of psychiatric nursing, National mental health programme.
- Mental health assessment -history taking, MSE, Interview technique.
- National mental health programmes
- Therapeutic nurse patient relationship-components, phases, significance
- Communication skills, factors influencing communication, barriers.
- Psycho pathophysiology of human behaviour, classification of mental disorder
- Disorders of thought, motor activity, perception, mood, speech, memory, concentration and judgement.
- Management of patients with various mental disorders.
- Personality, types of personality related to psychiatric disorders.
- Substance use, child and adolescent psychiatric disorder- sleep, eating and sexual disorders.
- Bio-psychosocial therapies and role of nurse in these therapies.
- Concept of preventive mental health services during childhood, adolescent, adulthood and old age, Role of nurse in national mental health services.
- Psychiatric emergencies and crisis intervention- Patients with overactive, underactive and violent behaviour, suicide, adverse drug reactions, withdrawal symptoms, a/c psychosis.
- Forensic psychiatry and legal aspects.

## **MODULE V11**

### **CHILD HEALTH NURSING**

- Concept of child health care, trends and emerging challenges for paediatric nurse.
- Preventive paediatrics and vital statistics
- Growth and development
- Role of nurse in caring a sick child, Paediatric procedures
- Medical and nursing management of children with behavioural disorders
- Management of children with communicable diseases. child abuse
- Protein energy malnutrition, bites, stings, pica, tics
- Health problems of children, accidents, obesity, Juvenile delinquency.
- Nursing management of patients with congenital disorders
- Management of patients with various disorders of Renal system, Respiratory system, GI system, CVS system, haematological system, neurological system, and endocrine system.
- Management of handicapped children, mental retardation, dyslexia, vision and hearing impairment.
- Fluid electrolyte imbalance, burns.
- Problems of locomotion - osteomyelitis, poliomyelitis, kyphosis, lordosis, scoliosis, fractures.
- Pre and post operative care of children undergoing surgery.
- Various child welfare services, ethical and legal aspects of paediatric nursing.

## **MODULE V111**

### **MIDWIFERY AND GYNEACOLOGICAL NURSING**

- Scope and trends in midwifery, vital statistics related to maternal health in India.
- Stages of embryological and fetal development
- Normal pregnancy and its management - Preconception care, genetic counselling, physiological changes in pregnancy, diagnosis of pregnancy, antenatal care and minor disorders of pregnancy.
- Various stages of labour, role of midwife in caring for a woman in labour.
- Management of normal newborn, management of normal puerperium.
- Management of complications during pregnancy and risk pregnancy.
- Management of high risk labour and complications of third stage.



- Puerperal complications and its management.
- Assessment and management of high risk and sick newborn.
- Levels of care in neonatal ICU.
- Obstetric emergencies ,post abortion care.
- Role of midwife in the administration of drugs during pregnancy, labour and post partum period, drugs used in obstetrics, teratogens.
- Ethical and legal issues related to midwifery.
- Terms used in gynaecology, history taking, examination and investigation in gynaecology.
- Physiology, psychology and pathology of puberty
- Fertility and infertility.
- Management of patients with various pelvic infections.
- Care of women with gynaecological disorders.
- Management of patients with breast disorders.
- Menopause – physiological changes, signs and symptoms, health education and counselling, hormone replacement therapy and surgical menopause.

## **MODULE 1X**

### **NURSING EDUCATION & INTRODUCTION TO RESEARCH**

- Concept of education, teaching learning process, methods of teaching
- Significance of research in nursing, research process- Purposes, objectives and steps of research approach and design – types, methods, advantages and disadvantages
- Data collection process –methods and instruments of data collection, data analysis-compilation, tabulation, classification, summarization ,presentation and interpretation of data using descriptive statistics
- Introduction to statistics–scales of measurement, frequency distribution, mean, median, mode and standard deviation, utilization of research in nursing practice.

## **MODULE X**

## **PROFESSIONAL TRENDS AND ADJUSTMENT & NURSING ADMINISTRATION AND WARD MANAGEENT**

- Nursing as a profession, role of a professional nurse
- Professional ethics ,etiquettes for employment, personal and professional development- career nursing ,continuing education and in-service education.
- Legislation in nursing, profession and related organisations.
- Philosophy and principles of administration
- Management process - POSDCORB, Policies of hospital and various department of hospital
- Administration of different health care units, legal responsibilities, leadership styles.
- Management of supplies and equipment
- Cost and financing of health care services in India, national health plans, role of state and central government in allocation of funds, health insurance.

**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**