## GENERAL ENGLISH (Full Marks : 100)

(a)	Essay Writing 20 Marks
(b)	Précis Writing 10 Marks
(c)	Letter Writing 10 Marks
(d)	Idioms & Phrases 16 Marks
(e)	Expansion of passages 10 Marks
(f)	Comprehension of given passages 10 Marks
(g)	Grammar:
	Parts of Speech : Nouns, Adjective, Verb, Adverb, Preposition, etc 14 Marks
(h)	Correct usage and vocabularies 10 Marks

#### \* \* \* \* \* \* \*

# NURSING SCIENCE PAPER - I (Full Mark - 150)

Unit - I	Anatomy & Physiology	20 Marks
Unit II	Microbiology	5 Marks
Unit III	Psychology	10 Marks
Unit IV	Sociology	5 Marks
Unit V	Fundamentals of Nursing	50 Marks
Unit VI	Medical Surgical Nursing	60 Marks

## **NURSING SCIENCE**

### PAPER - II (Full Mark - 150)

Unit - I	Psychiatric Nursing	20 Marks
Unit - II	Community Health Nursing	25 Marks
Unit - III	Midwifery & Gynaecological Nursing	45 Marks
Unit - IV	Paediatric Nursing	30 Marks
Unit - V	Professional Trends and Adjustment	5 Marks
Unit - VI	Administration and Ward Management	5 Marks
Unit - VII	Aptitude Test	20 Marks

#### \* \* \* \* \* \* \*

## **NURSING SCIENCE**

### <u>PAPER - I</u> (Full Mark - 150)

#### Unit - I Anatomy & Physiology (20 marks)

a) Skeletal system
Bones : Types, Structure, Functions;
Joints : Classification, Structure and Functions.

b) **Muscular System :** Types, Sturcture, Functions; Position and action of chief Muscles of the body.

### c) Cardio-Vascular System :

Blood : Composition, Blood Group, Cross Matching

Heart : Position, Structure, Conduction System, Functions and Cardiac Cycle; Circulation of Blood; Blood Pressure and Pulse; Lymphatic System.

- d) **Respiratory System :** Structure and Functions of Respiratory Organs; Physiology of Respiration; Characteristics of normal Respiration and its deviations.
- e) **Digestive System :** Structure and functions of Organs of Digestion and absorption
- f) **Excretory System :** Structure and functions of Organs; Structure and functions of the Skin; Regulation of body Temperature.
- g) **Nervous System :** Cranial nerve and its functions, Ventricles of the brain and cerebro-spinal fluid.
- h) **Endocrine System :** Sturcture and functions of Pituitary, Pancreas, Thyroid, Parathyroid, Thymus and Supra Renal Glands.
- i) **Sense Organs :** Structure and functions of eye, ear, nose and tongue; Physiology of Vision, Hearing and Equilibrium.
- **Reproductive System :** Structure and functions of reproductive and accessory organs; Menstrual Cycle and Menopause; Reproductive Health; Structure and functions of male reproductive system.

#### Unit II Microbiology (5 marks)

- a) Sources of Infection
- b) Portals of Entry and Exit of microbes
- c) Transmission of Infection
- d) Collection of specimens & Principles to be kept in mind while collecting specimen
- e) Immunity : Meaning; Types of Immunity; Immunization Schedule (Currently used)
- f) Different types of Sterilization; Disinfection; Bio-safety and waste management.

- a) Definition, Scope and Importance of Psychology for Nurses
- b) Psychology of Human behaviour : Behavioural process of adjustment and maladjustment. Attitudes : Meaning, development, changes in attitude and effect of attitude on behaviour Frustration : Sources and nature of frustration, measures to overcome frustration Defense mechanisms : Meaning, Importance and Classification.
- c) **Personality :** Meaning, Types, Factors affecting personality development.
- d) **Intelligence and related Factors :** Mental ability and intelligent behaviour Nature of intelligence; Development of intelligence behaviour, Measurement of intelligence.
- e) **Learning :** Nnature of Learning, Types of Learning, Factors promoting effective learning, memory and forgetfulness.
- f) **Observation :** Attention and perception, factors affecting attention and observation and errors in perception.

### Unit IV Sociology (5 Marks)

- a) Importance of Sociology in nursing
- b) The Socio-cultural and Economic aspects of the comunity and their effects in health and illness.
- c) **The Family** : Family as a social institution and basic unit for health services; Basic needs of family, Advantages of Planned parenthood.
- d) **The Society**: Rural and Urban Society; Social Problems; Unmarried mothers, dowry system, prostitution, drug addiction, alcoholism, delinquency, handicapped, child abuse, domestic violence, women abuse; Social agencies and remedial measures.
- e) **Economy** : Resources of the country Natural, occupational, agricultural, industrial etc. Population Explosion - Its effect

### Unit V Fundamentals of Nursing (50 Marks)

- a) **Nursing as a profession :** Concept of Nursing, Definition of Nursing; Functions of Nurse; Qualities of a Nurse; Comprehensive Nursing care, Code of Ethics and Ethical behaviour expected.
- b) **Maintenance of therapeutic Environment :** temperature, light, noise, humidity, aesthetic consideration in the environment.
- c) Admission of a patient : patients unit set up and care, admission procedure, reception of Patient, care of patient's belongings
- d) **Discharging a Patient :** preparation of the patient physically and mentally; Discharge procedure; Hospital Policies; preparation of the relatives of the patient for discharge and advice to the patient.
- e) **The dying Patient :** Signs and symptoms of approaching death; Needs of the dying patient and relatives; Care of dying and last offices.

- f) **Hygienic needs and Physical needs :** Importance of maintaining Personal Hygiene; Nurses role in maintaining good personal Hygiene; Factors promoting and inhibiting physical comforts; Comfort devices and their uses; Different position for comfort and positioning of a patient; principles of lifting and moving patients in bed.
- g) Activity and Exercises : Importance of activity and Exercise in health and sickness, active and passive Exercise.
- h) Safety needs : Environmental hazards, role of nurses in prevention of health hazards.
- i) **Elimination needs :** Problems in sickness; Constipation, Diarrhoea, Retention and Incontinence of urine; Nurses role in meeting eliminating needs.
- j) **Care in Special Condition :** Unconscious patient; patient with fluid imbalance; patient with Dyspnoea; Physically handicapped; Perineal care of terminally ill-patient with urinary catheter.
- k) Meeting nutritional needs : Importance of Nutrition; Factors effecting nutritional needs.
- 1) **Observation of Patient :** General appearance & deviation; Temperature; Respiration; heart rate; Blood Pressure; Observation of Urine, Stool, Vomit, Sputum, any body fluid.
- m) **Care of equipments :** Disposable; re-useable; rubber goods; glassware; enamel-ware; metal; plastic; furniture; machinery.
- n) **Barrier nursing :** Standard safety precaution (Universal precaution); different types of hand washing.

Administration of drugs : Purpose of drugs; routes of administration
Principles; five rights; special consideration; prescription; safety in administering drugs
Storage and maintenance of drugs and nurses responsibility.
Factors influencing drugs action.
Terminologies and common abbreviation used in prescription of drugs.
Calculation of Drugs

p) **Recording and Reporting :** Importance of maintaining records and reports.

### **FIRST-AID**

Meaning of First Aid; Rules of First Aid

First Aid in emergency situation : Fractures, Poisoning; Drowning; Haemorrhage; Insects bites; Foreign bodies.

Role of nurse in disaster.

Transportation of the injured

### Unit VI Medical Surgical Nursing (60 Marks)

**Care of Surgical Patient** : Pre-Operative; Intra-Operative; Post-Operative; Nurses functions in operation theatre.

Anaesthesia : Classification, anaesthetic agents and role of a nurse in anaesthesia.

**Disorders of the Respiratory System**: Etiology, Clinical manifestation, diagnosis, treatment (medical, surgical), dietetics and Nursing Management with : Asthma, Pneumonia, Pulmonary TB, Emphysema, Bronchiectasis, Pulmonary Tumours, Pleural Effusions, Preventive and Rehabilitative aspects.

**Cardio-Vascular System** : Diseases of heart; Cardiac Arrhythmias; Cardiac arrests; Heart Blocks, Miocardial Infarction, Congestive heart failure; Hypertension; Angina Pectoris; Valvular Diseases, Infection in heart muscles.

Vascular Diseases : Arteriosclerosis; Atherosclerosis; Varicose veins and Aneurysms.

Blood Disorder : Anaemia; Leukemia; Haemophilia.

**Blood Transfusion** : Indications; Grouping and Matching; R.H. Factors; Plasma precautions in administration.

**Gastro Intestinal System** : Stomatitis, Gingivitis and Parotitis, Dental caries; Gastritis; Peptic ulcer; Enteritis; Colitis; Appendicitis; Haemorrhoids; Hernia; Hepatitis; Cirrhosis of liver; Cholecystitis; Hepatic coma; Pancreatitis; Tuberculosis; Carcinoma of GI tract.

**Musculo-Skeletal system** : Disorder and diseases of bones and joints : Sprains, Dislocation, Fractures, Arthritis, Osteomyelitis, Tumours, Tuberculosis, Osteoporosis.

**Genito Urinary System** : Diseases of kidney, ureter, bladder and urethra, congenital abnormalities, acute and chronic nephritis; Nephrosis; Uraemia; Obstruction; Pyelitis and Pyelonephritis; Cystitis; Disorder of Micturition; Urethritis; Prostatic hypertrophy; Malignancy.

**Nervous System** : Diseases of Brain : Headache, Migraine, Epilepsy, Tumours, Parkinsonism, Meningitis, encephalitis, Injury, Cerebro-vascular accidents.

Diseases of Spinal Cord : Injuries, Tumours, Spinal cord compressions

**Diseases of Nerves** : Neuritis and Neuralgia, Sciatica.

Endocrice System, Metabolic disorders, deficiency diseases :

Hyper and Hypo Secretions of : Thyroid, Parathyroid, Pituitary, Adrenal gland.

Cysts / Tumours

Metabolic Disorders : Diabetis mellitus, Obesity, Gout

**Deficiency Diseases** : Common deficiency diseases; Prevalence in India; Early symptoms, prevention and treatment.

The diseases of skin : Allergy, infections, Psoriasis, Burns, Scalds.

**Operation Theatre** : Fumigation, Role of nurse in operation theatre.

**Intensive Care Nursing** : Role of a nurse in ICU, Common gadgets use in ICU/CCU-Cardiac Monitors, Birds, respirator, defibrillators etc.

**Diseases and Disorders of eye** : Blindness : Causes and prevention; Conjunctivitis, Glaucoma, Cataract, Injury and Haemorrhage.

Diseases of the ear : Wax, foreign bodies, Otitis Media, Injuries and deafness, Mastoiditis.

**Disease of nose and throat** : Rhinitis, Deviated Nasal Septum, Sinustitis, Allergy, Adenoids, Laryngitis, Tonsillitis, Pharyngitis, Injury.

### **Communicable Diseases :**

*Virus* : Measles, influenza, chicken pox, smallpox, mumps, infective hepatitis, poliomyelitis *Bacteria* : Diphtheria, whooping cough, tetanus, leprosy, typhoid, dysentery, gastro-enteritis and cholera

Zoonoses : Kala-azar, plague and rabies.

Mosquito : Malaria, filaria, dengue fever

Sexually Transmitted diseases : Gonorrhoea, Syphilis, AIDS

### **NURSING SCIENCE**

### <u>PAPER - II</u> (Full Mark - 150)

#### Unit - I Psychiatric Nursing (20 Marks)

**Introduction** : Meaning of mental illness; terms used in psychiatry; etiology of mental illness and contributing factors, legal aspects in the care of the mentally sick.

**Community Responsibility** : Attitudes and Misconceptions towards mentally ill. Health and social service for the mental illness.

**Diagnosis** : Early recognition of deviations from the normal; Classification of mental diorders; Signs and symptoms of common mental illness.

**Management** : Physical therapy, drug therapy, electro convulsive therapy, psychotherapy, hypnosis, psychoanalysis, behavioural therapy, reactional and social therapy, occupational therapy.

**Role of the Nurse** : Over active patient, Destructive patient, Suicidal patient, Depression, Withdrawal and Mania; Prevention of accidents amongst mentally ill. Observation reporting and recording; procedure for admission into and discharge from mental hospitals.

### Unit - II Community Health Nursing (25 Marks)

**Aspects of Community Health Nursing** : Family health Services, maternal and child care and family planning, services under 5 clinic. School Health Services, Industrial Nursing, Geriatric Nursing, Tuberculosis Nursing, Nurses role in National Health programmes.

Demographic and Family Welfare ; Demography

**Family Welfare** : Its meaning, aims, objectives and importance; Policy, Family Planning methods, National Programme, Nurse's role in family Welfare programme.

Health Team : Community Health Centre (CHC), Primary Health Centre (PHC), Sub-Centre (SC)

**Roles of Nursing Personnel at Various levels** : Male and Female Health Worker, Health Supervisor, Public Health Nurse, Public Health Nurse Supervisor.

Vital Health Statistics ; Concepts; Uses, Sources, Important rates and indices, Vital Health Records and their utility, principles of reporting and recording.

**Health Education and Communication skills** : Aims and Objectives of Health education and scope; Methods of health education and principles of Health education, Communication, Meaning and Methods of Communication, verbal and non-verbal communication, barriers of communication.

Audio Visual aids : Definition, Advantages and disadvantages.

National Immunization Schedule.

### Unit - III Midwifery & Gynaecological Nursing (45 Marks)

Introduction : Definition : Midwifery, Obstetrical Nursing.

**Female pelvis** : Structure, diameters and type; Fertilisation and implantation of the ovum, fetal development and fetal circulation.

**Normal Pregnancy** : Physiological changes due to pregnancy; Signs, symptoms and diagnosis; influence of hormones.

Pre-natal care : History taking; Calculation of Expected date of Delivery, Routine Examinations

Care and advice regarding : Diet in pregnancy; ante-natal Exercises.

Minor disorders of pregnancy and alleviation of discomfort

**Diseases associated with pregnancy** : Cardio vascular, Urinary, Metabolic, Nutritional deficiencies, Sexually transmitted diseases.

**Normal Delivery (Preparation)** : For mother and baby; Preparation of the patient and delivery room - hospital and home; Psychological preparation of mother and family.

Normal labour : Definition, stage and duration; True and False labour

**First stage of Labour** : Signs of onset of labour; Psychological changes in first stage of labour; Management and preparation during labour; Equipment for normal delivery, Vaginal Examination.

**Second Stage of Labour** : Signs of second stage; Mechanisms of labour; Monitoring of maternal and fetal conditions; Procedure for conduct of normal delivery; Prevention of Perineal tear; Episiotomy, suturing and care.

**Third Stage of Labour** : Definition, Immediate care of newborn baby, management of third stage of labour.

**Nursing Management of baby and Birth** : Assessment, Apgar scoring, examination for defects (head to foot examination); Care of cord, eyes and skin, maintenance of body temperature, prevention of infection and injury.

**Nursing Management of mother during puerperium** : Definition, Immediate postnatal care; Physiological changes during puerperium, establishment of breast feeding, post natal exercises, postnatal examination, follow up family welfare, complication during puerperium, PID, PPH, DIC, Embolism, Puerperal sepsis.

**Complications of pregnancy and its management** : Bleeding in early pregnancy, bleeding in late pregnancy, pregnancy induced hypertension, pre-eclampsia and eclampsia, Hydramnios, Oligohydramnios, Hydatidiform mole, intra uterine growth retardation, intra uterine death, post maturity, gestational diabetes mellitus.

**High risk pregnancy and its management** : Anaemia, Jaundice, Viral infection, Urinary tract infections, Heart diseases, diabetes mellitus, Sexually Transmitted Diseases, AIDS, Teenage Pregnancy, Elderly pregnancy, Multi Para & Multiple pregnancy, Un-Educated mother.

**Labour Complications** : Malpresentations and malpositions, Occipito posterior position, Breech and shoulder; Face and Brow; Cord presentation and prolapse, obstructed labour, ruptured uterus, post partum haemorrhage, atonic uterus, retained placenta and membranes.

**Obstetrics operations** : Manual removal of placenta; Version; Internal, External; Vacuum extraction; Caesarean section; Medical termination of pregnancy; Laparoscopic sterilization, Embryotomy, Forcep delivery

Drugs used in Obstetrics

Ethical and legal aspects related to midwifery and gynaecological Nursing.

Fertility and Infertility : Definition, causes both in male and female investigation and management.

**Diseases and Disorders of female reproductive system including breasts** : Infection, cyst, tumours and fibroids; Abortion; Ectopic pregnancy; Vaginal fistula; Sexually Transmission disease; Abnormalities of menstruation; Menopause; Mastitis; breast abscess; Tumours; Malignancy.

## Unit - IV Paediatric Nursing (30 Marks)

**The Healthy Child** : Growth and developments and factors affecting growth and development; Assessment of Growth and development; Nurses responsibilities to meet the nutritional needs; Accidents - Principal causes and Prevention; Value of play and selection of play materials; Child guidance clinics, Comprehensive care of New born, Infant and children (Physical and Psychological)

**Breast Feeding** : Importance and principles; Preparation of mother; Difficulties in breast feeding; Factors inhibiting and promoting lactation.

**Introduction of Solids** : Weaning, Diet of healthy child, Artificial feeding; Feeding technique; Common Problems in feeding.

Pre and Post Operative care of children

**Diseases of Children** : Etiology, Signs and symptoms, medical and surgical management, nursing care, Complication, diet and drug therapy, prevention and treatment with diseases -

- a) Gastro-Intestinal System : Thrush; Gastro enteritis, acute and chronic diarrhoea, Hernia, Intus susception, megacolon, Appendicitis, Jaundice, Worm infestation.
- b) Respiratory System : Croup, influenza, bronchitis, pneumonia, acute respiratory failure.
- c) Genito-urinary system : Nephritis, nephrotic syndrome, Undescended testes, Wilm's tumor.
- d) Cardio Vascular System : Rheumatic fever and Rheumatic heart diseases.
- e) Nervous System : Convulsions, epilepsy, Meningitis, Encephalitis, Mental retardation, Mongolism.
- f) Eye and Ear : Conjunctivitis, Otitis Media
- g) Nutritional Disorder : Marasmus; Kwashiorkor; Vitamin Deficiencies
- h) Communicable Diseases : Measles, Small Pox and Chicken Pox; Poliomyelitis; Mumps, Tetanus, Diphtheria and Whooping Cough, Infective Hepatitis, Scabies, Eczema, Pediculosis, Ringworm, Fungus, Furunculosis.
- i) Hemotological Disorder : Anemias, Leukemia, Thalassaemia Leukemia, Haemophilia
- j) Endocrine disorder : Diabetis insipidus, Dwarfism.
- k) Child health Emergencies : Burns, Drowning, Foreign Bodies Aspiration, Poisoning
- 1) Psychological disorder and problems : Enuresis, tic, speech defects, headache, thumb sucking, delinquency.
- m) The Handicapped Child : Importance of early diagnosis; Care of physically and mentally handicapped child; Deprived child, Community facilities, Adoption laws, Foster and orphanages.

### **Common Congenital Anomalies :**

- 1) Cleft lip and cleft palate
- 2) Ambiguous genitalia
- 3) Hypospadias
- 4) Epispadias
- 5) Hydrocephalus
- 6) Hypertrophied pyloric stenosis
- 7) Imperforate anus
- 8) Umbilical hernia
- 9) Phimosis
- 10) ASD & VSD, TOF
- 11) Meningocele
- 12) Cerebral palsy
- 13) Oesophageal atresia

### Unit - V Professional Trends and Adjustment (5 Marks)

Introduction : Definition of Nursing profession

**Qualities of a professional nurse** : Meaning of ethics, code of ethics for nurses, ICN (International Council of Nurses) Code of ethics.

Continuing Education : Meaning, Importance and scope of continuing education.

**Professional and related organisations** : International Council of Nurses (ICN); Indian Nursing Council (INC), State Nursing Council, World Health Organisation, UNICEF, Trained Nurses Association of India (TNAI); Red Cross and St. John's Ambulance; Trained Nurses Association of India (TNAI).

**Legislation in Nursing**: Purpose and importance of Laws in Nursing, Common Legal Terms; Legal responsibilities of a Nurse for protection and safeguard from legal involvement; Fundamental conduct and Service rules and institutional rules.

#### Unit - VI Administration and Ward Management (5 Marks)

**Management /Administration** : Definition Elements and Principles of Administration and Management.

Planning : Aims, Principles, Methods and type

Organization : Deligation, staffing and budgetting.

Ward Administration : Administration of hospital and ward.

Job Description and Job satisfaction, Staff Development and Staff Welfare, Management of equipment and supplies.

Records and Reports : Meaning, type of records and reports maintained in the ward.

- Importance and use of records and reports.

### Unit - VII Aptitude Test (20 Marks)

#### (a) Numerical And Figurework Tests: (4 Marks)

These tests are reflections of fluency with numbers and calculations. It shows how easily a person can think with numbers. The subject will be given a series of numbers. His/Her task is to see how the numbers go together to form a relationship with each other. He/ She has to choose a number which would go next in the series.

#### (b) Verbal Analysis And Vocabulary Tests: (6 Marks)

These tests measure the degree of comfort and fluency with the English language. These tests will measure how a person will reason with words. The subject will be given questions with alternative answers, that will reflect his/her command of the rule and use of English language.

#### (c) Visual And Spatial/3-D Ability Tests: (4 Marks)

These tests are used to measure perceptual speed and acuity. The subject will be shown pictures where he/she is asked to identify the odd one out; or which comes next in the sequence or explores how easily he/she can see and turn around objects in space.

#### (d) Abstract Reasoning Tests: (6 Marks)

This test measures the ability to analyse information and solve problems on a complex, thought based level. It measures a person's ability to quickly identify patterns, logical rules and trends in new data, integrate this information, and apply it to solve problems.

\* \* \* \* \* \* \*