# GENERAL ENGLISH (Full Marks: 100)

(a)	Essay Writing (Not more than 300 words)
(b)	Idioms & Phrases (Objective Type/MCQ)
(c)	Comprehension of given passages (Objective Type/MCQ) 12 Marks
(d)	Grammar (Objective Type/MCQ)
	Parts of Speech: Nouns, Adjective, Verb, Adverb, Preposition, etc.
(e)	Composition (Objective Type/MCQ)
	i) Analysis of complex and compound sentences
	ii) Transformation of sentences
	iii) Synthesis of sentences
(f)	Correct usage and vocabularies (Objective Type/MCQ) 16 Marks
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	NURSING SCIENCE
PAPER - I (Full Mark - 150)	
Unit - I	Anatomy & Physiology
Unit II	Microbiology
Unit III	Psychology
Unit IV	Sociology
Unit V	Fundamentals of Nursing
Unit VI	Medical Surgical Nursing
	NURSING SCIENCE
PAPER - II (Full Mark - 150)	
Unit - I	Psychiatric Nursing
Unit - II	Community Health Nursing
Unit - III	Midwifery & Gynaecological Nursing
Unit - IV	Paediatric Nursing
Unit - V	Professional Trends and Adjustment
Unit - VI	Administration and Ward Management
Unit - VII	Aptitude Test

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## 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.
- j) **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.

## **Unit III** Psychology (10 Marks)

- 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.
  - **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)

c)

- 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.
- o) 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.

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