



SEMESTER – III

PAPER CODE	SUBJECT NAME	THEORY HOURS	PRACTICAL HOURS	THEORY MARKS	PRACTICAL MARKS
NA301	PRIMARY HEALTH NURSING & CARE	45 Min	1 Hrs.	50	50
NA302	PEDIATRIC NURSING	45 Min	1 Hrs.	50	50
NA303	MIDWIFERY	45 Min	1 Hrs.	50	50
NA304	PHARMACOLOGY & MICROBIOLOGY	45 Min	1 Hrs.	50	50

PRIMARY HEALTH NURSING & CARE

THEORY

1. Introduction to Primary Health Care (PHC)

- Definition and importance of PHC
- Principles of PHC: Equity, Accessibility, Community Participation, Intersectoral Coordination
- Evolution of primary health care in India
- Alma Ata Declaration and Sustainable Development Goals (SDGs)

2. Structure of Primary Health System in India

- Sub-Center
- Primary Health Center (PHC)
- Community Health Center (CHC)

Urban PHC

- Role of Nursing Assistant in each setup
- Linkages with district hospital and referral units

3. Functions & Roles of Primary Health Care Nurse

- Home visiting, counseling, minor treatments
- Health check-up and screening
- Recording and reporting community data
- Support during immunization and MCH services
- Maintaining drug kits and equipment
- Conducting village health and nutrition days (VHND)

4. Common Illnesses at Primary Level



- Identification and basic care of:
 - Fever, cold, cough
 - Diarrhea & dehydration
 - Minor wounds, skin infections
 - Malaria, Dengue, Typhoid, Tuberculosis
 - Worm infestation
- First aid and referral
- Distribution of essential drugs

5. Maternal and Child Health in PHC

- Antenatal and postnatal care at sub-center
- Early detection of high-risk pregnancy
- Institutional delivery promotion
- Growth monitoring and immunization
- Newborn and child care follow-up
- Lactation and nutrition support

6. Family Planning & Reproductive Health

- Family planning counseling
- Temporary and permanent methods
- Record-keeping and follow-up
- RTI/STI awareness
- Menstrual hygiene education

7. Health Promotion & Disease Prevention

- Personal and community hygiene
Nutrition and safe drinking water
- Oral rehydration therapy (ORS)
- Safe disposal of waste
- Health education and community mobilization

8. Role in National Health Programs

- RMNCH+A
- National Immunization Program
- National Vector Borne Disease Control
- Janani Suraksha Yojana (JSY)
- Ayushman Bharat and Health & Wellness Centers

9. Basic Health Statistics and Reporting

- Household survey



- Eligible couple and child register
- Immunization register
- Nutrition records
- Report formats for ASHA coordination
- Maintaining daily activity diary

PRACTICAL

➤ **Household Survey & Registration**

- Conduct family and individual surveys
- Prepare eligible couple register (ECR)
- Maintain child register for immunization
- Record births and deaths in the area
- Identify high-risk individuals (elderly, pregnant women, disabled)

➤ **Community Health Education Activities**

- Conduct health talks on:
 - Personal hygiene
 - Safe drinking water
 - Malaria prevention
 - Breastfeeding and weaning
 - Family planning methods
- Use flashcards, flipcharts, posters
- Engage school children and SHG members

Maternal and Child Health Activities

- Antenatal home visits: BP, weight, abdominal exam (under supervision)
- Postnatal care: Breastfeeding guidance, lochia check, perineal care
- Record immunization due dates for infants
- Provide iron, folic acid, calcium supplements
- Educate on nutrition during pregnancy and lactation

➤ **Basic Treatment and First Aid**

- Identify fever, diarrhea, dehydration, scabies, worm infestation
- Administer ORS, paracetamol, albendazole, iron tablets (as per protocol)
- Perform dressing for minor wounds
- Monitor temperature, pulse, BP
- Refer serious cases to PHC/CHC

➤ **Growth Monitoring & Nutrition Assessment**

- Measure height, weight, MUAC
- Plot growth chart (WHO standard)



- Classify nutritional status (normal, moderate, severe malnutrition)
- Counsel mothers on age-appropriate feeding
- **Immunization Support**
 - Assist in immunization sessions at sub-center or VHND
 - Prepare vaccines and maintain cold chain
 - Identify child as per register
 - Maintain immunization card
 - Manage minor reactions and advise mothers
- **Sanitation & Hygiene Practices**
 - Demonstrate:
 - Safe hand washing techniques
 - Safe water storage
 - Household waste disposal
 - Latrine usage and maintenance
 - Mobilize the community during Swachh Bharat or similar campaigns
- **National Health Program Activities**
 - Assist in malaria fever survey and blood smear collection
 - Help organize health screening camps
 - Participate in Vitamin A, deworming, or polio campaigns
 - Distribute IEC material during campaigns (TB, leprosy, COVID-19 etc.)
- **Coordination & Communication**
 - Collaborate with ASHA, Anganwadi Worker, MPW
 - Report daily activities to PHC
 - Maintain communication diary / activity log
 - Participate in team meetings and VHND review

PEDIATRIC NURSING

THEORY

1. Introduction to Pediatric Nursing

- Definition and scope of pediatric nursing
- Role and responsibilities of Nursing Assistant in child care



- Rights of children and child protection
- Growth vs. development: meaning, principles

2. Growth and Development

- Normal growth milestones (0–5 years)
- Factors influencing growth and development
- Physical, emotional, cognitive development
- Assessment tools: Weight, Height, MUAC, Head Circumference
- Use of growth charts

3. Nutritional Needs of Infants and Children

- Exclusive breastfeeding (first 6 months)
- Weaning practices
- Balanced diet for toddlers and preschoolers
- Nutrition deficiency disorders:
 - PEM (Kwashiorkor, Marasmus)
 - Rickets, Anemia, Vitamin A deficiency
- IFA and Vitamin A supplementation

Common Childhood Illnesses

- ARI (Acute Respiratory Infection)
- Diarrhea and dehydration
- Fever, Measles, Chickenpox
- Skin infections, Ear infections
- Simple management and home remedies
- Referral system and emergency signs

4. Neonatal Care (0–28 days)

- Immediate newborn care (clean cord care, warmth, breastfeeding)
- Newborn danger signs (fast breathing, poor sucking, fever, cold extremities)
- Low birth weight and preterm baby care
- Kangaroo mother care (KMC)
- Immunization at birth (BCG, OPV-0, Hepatitis B)

5. Immunization

- National Immunization Schedule
- Route, dose, site of each vaccine
- Maintenance of cold chain
- Monitoring adverse events following immunization (AEFI)
- Updating child immunization cards



6. Child Health & National Health Programs

- Integrated Child Development Services (ICDS)
- Rashtriya Bal Swasthya Karyakram (RBSK)
- Mid-Day Meal Scheme
- National Deworming Days
- Vitamin A Campaign

7. Common Pediatric Emergencies

- Febrile seizures
- Severe dehydration
- Choking and foreign body
- Burns and injuries
- First aid and when to refer

8. Health Education & Counseling

- Hygiene and sanitation for children
- Safe feeding and food handling
- Diarrhea prevention (handwashing, clean water)
- Parental guidance on home care

PRACTICAL

➤ Growth Monitoring

- Measure and record:
 - Weight
 - Height/Length
 - Mid Upper Arm Circumference (MUAC)
 - Head and chest circumference (if <1 year)
- Plot findings on WHO growth chart
- Interpret malnutrition grades
- Educate parents about healthy child development

➤ Nutritional Assessment & Feeding

- Observe breastfeeding technique and positioning
- Assist in weaning and complementary feeding
- Provide nutritional counseling to mothers
- Demonstrate preparation of age-appropriate weaning food
- Identify signs of nutritional deficiency (e.g. anemia, PEM)

➤ Immunization Support



- Assist in routine immunization sessions at VHND/sub-centers
- Identify child from immunization register
- Prepare vaccine dose and site
- Maintain cold chain and record AEFI if any
- Fill immunization card and educate mother on schedule

➤ **Newborn & Infant Care**

- Assist in newborn bathing, cord care, thermal protection
- Educate on exclusive breastfeeding
- Identify newborn danger signs (e.g. lethargy, poor feeding, fever, fast breathing)
- Support Kangaroo Mother Care (KMC) in low birth weight babies
- Perform basic assessments under supervision (skin color, cry, breathing, reflex)

➤ **Management of Common Childhood Illnesses**

- Identify and assist in managing:
Diarrhea (prepare and administer ORS)
 - ARI (monitor RR, chest in-drawing)
 - Fever and skin infections
 - Minor wounds and injuries (cleaning, dressing)
- Refer cases with red flag signs (convulsions, severe dehydration, unconsciousness)

➤ **Pediatric First Aid & Safety**

- Apply basic first aid in:
 - Choking
 - Burns
 - Febrile seizures
 - Cuts and insect bites
- Educate family on child safety measures at home

➤ **Health Education Activities**

- Conduct health talks with mothers in:
 - Breastfeeding & weaning
 - Immunization importance
 - Hand hygiene and personal cleanliness
 - Diarrhea prevention
 - Indoor air pollution & ARI
- Use posters, flipcharts, and visual aids

➤ **Home Visits and Follow-up**



- Conduct home visits for:
 - Postnatal child monitoring
 - Immunization follow-up
 - Malnutrition cases
 - Non-immunized dropouts
- Maintain visit report and feedback form

MIDWIFERY

THEORY

1. Introduction to Midwifery

- Definition, goals & scope of midwifery
- History of midwifery & maternal care in India
- Role of Nursing Assistant in midwifery
- Legal and ethical aspects of midwifery practice

2. Anatomy & Physiology in Obstetrics

- Female reproductive system (internal & external)
- Menstrual cycle and ovulation
- Changes during pregnancy
- Fetal development stages
- Placenta – structure and functions
- Pelvis – types and obstetric importance

3. Antenatal Care (ANC)

- Aims and objectives of antenatal care
- Assessment and registration of pregnant women
- Routine investigations & examinations
- Immunizations (TT, Iron, Folic Acid)
- Danger signs during pregnancy
- Minor discomforts and management
- Nutrition in pregnancy
- Birth preparedness and complication readiness

4. Intranatal Care (Labour & Delivery)

- Signs and stages of labour
- Conducting normal delivery
- Use of partograph
- Preparation and sterilization of delivery tray



- Aseptic techniques in labour room
- Active management of third stage of labour (AMTSL)
- Immediate care of mother and newborn
- Management of common complications during labour

5. Postnatal Care (PNC)

- Care of mother during postpartum period
- Postnatal assessment
- Breastfeeding – initiation, technique, benefits
- Postnatal exercises
- Nutrition and hygiene
- Identification and referral for postpartum complications
- Immunization schedule

6. Newborn Care

- Resuscitation of newborn (basic steps)
- APGAR scoring
- Thermal protection (Kangaroo care)
- Breastfeeding support
- Common neonatal problems and management
- Low birth weight (LBW) and preterm care
- Identification of danger signs in neonates

7. High-Risk Pregnancy & Obstetric Emergencies

- PIH, eclampsia
- Anaemia in pregnancy
- Antepartum haemorrhage (APH)
- PPH – prevention and first aid
- Prolonged/obstructed labour
- Malpresentation
- Retained placenta
- Sepsis and shock

8. Family Welfare & Reproductive Health

- Family planning methods (temporary & permanent)
- Counselling techniques
- Emergency contraception
- Adolescent reproductive health
- Role of Nursing Assistant in national family welfare programs

9. Midwifery Procedures (Practical Skills)



- Handwashing and gloving
- Abdominal palpation & fetal heart sound auscultation
- Antenatal check-up & record maintenance
- Urine testing for sugar and albumin
- Hemoglobin estimation
- Preparation & assistance in normal delivery
- Newborn resuscitation
- Postnatal assessment
- Breastfeeding assistance
- Record keeping and reporting

Community-Based Midwifery Services

- Identifying high-risk mothers in community
- Conducting home deliveries (Skilled Birth Attendant role)
- Referral and transport arrangement
- Role of Nursing Assistant in VHND, sub-centre, PHC
- Health education in maternal and child care

PRACTICAL

➤ Antenatal Care (ANC) Practical Skills

1. Registration of antenatal mothers
2. Calculation of EDD using LMP
3. Handwashing and use of gloves
4. Taking antenatal history and physical examination
5. Measurement of:
 - Height and weight
 - Blood pressure
 - Fundal height
6. Abdominal palpation (Leopold's maneuvers)
7. Auscultation of fetal heart sound (FHS)
8. Testing of urine for:
 - Albumin
 - Sugar
9. Hemoglobin estimation
10. Iron & Folic Acid (IFA) supplementation
11. Tetanus toxoid (TT) immunization
12. Identification of danger signs in pregnancy
13. Health education on diet, rest, hygiene, and ANC visits
14. Maintaining ANC register and records

➤ Intranatal Care (Labour Room Skills)

1. Preparation of delivery tray/set



2. Preparing mother for delivery (positioning, hygiene)
3. Monitoring labour using **Partograph**
4. Conducting normal vaginal delivery under supervision
5. Active Management of Third Stage of Labour (AMTSL)
6. Cord clamping and cutting
7. Delivery of placenta and checking its completeness
8. Ensuring uterine contraction after delivery
9. Immediate newborn care:
 - Cleaning the airway
 - APGAR scoring
 - Thermal protection (wrapping)
10. Assisting in episiotomy and suturing (if applicable)
11. Recording vital signs of mother and baby
12. Proper disposal of biomedical waste
13. Maintenance of labour room records

➤ **Postnatal Care (PNC) Practical Skills**

1. Postnatal assessment of mother (vitals, involution)
2. Breast examination and management of breastfeeding issues
3. Support and guidance on exclusive breastfeeding
4. Perineal care and hygiene
5. Educating mother on postnatal exercises
6. Identification of postnatal complications (bleeding, fever)
7. Immunization of newborn (BCG, OPV, Hep-B)
8. Counseling on family planning methods
9. Health education for mother and family
10. Maintaining PNC records and home visit reports

➤ **Newborn Care Practical Skills**

1. Newborn assessment (weight, length, head circumference)
2. Skin-to-skin contact (Kangaroo Mother Care)
3. Early initiation of breastfeeding
4. Care of cord stump
5. Care of low birth weight and preterm babies
6. Identification of danger signs (jaundice, respiratory distress)
7. Newborn resuscitation using bag and mask (under supervision)
8. Temperature regulation and bathing techniques
9. Keeping newborn warm (room setup)
10. Maintaining newborn care records

➤ **Family Welfare & Reproductive Health**

1. Counseling on family planning methods



2. Demonstration of contraceptive use (models only)
3. Referral for sterilization or IUD insertion
4. Maintenance of eligible couple register
5. Providing emergency contraception (under guidance)
6. Community health education on spacing and limiting methods

Community-Based Midwifery Practice

1. Conducting home visits for antenatal and postnatal care
2. Identifying high-risk mothers and referring
3. Assisting in home deliveries (if applicable)
4. Educating families on maternal & child care
5. Organizing and participating in **Village Health & Nutrition Day (VHND)**
6. Mobilizing women for antenatal check-ups
7. Coordinating with ASHA, AWW, and health staff
8. Reporting and record keeping at Sub-centre

PHARMACOLOGY & MICROBIOLOGY

THEORY

PHARMACOLOGY SYLLABUS

1. Introduction to Pharmacology

- Definition and scope of pharmacology
- Classification of drugs
- Sources of drugs
- Forms of drugs (solid, liquid, semisolid, gaseous)
- Routes of drug administration (oral, IM, IV, SC, etc.)
- Dosage forms and calculations
- Factors affecting drug action
- Adverse drug reactions and side effects
- Drug interactions
- Storage and handling of medicines

2. Commonly Used Drugs in Nursing Practice

- Antipyretics, analgesics
- Antibiotics and antifungals
- Antiseptics and disinfectants
- Antiemetics and antidiarrheals
- Antacids and laxatives
- Antihypertensives



- Antidiabetics
 - Iron, calcium, and vitamin supplements
 - Oxytocics and uterotonics (used in labour)
- Emergency drugs (e.g., adrenaline, atropine)

3. Drug Administration Techniques

- Oral medication
- Topical application (creams, ointments)
- Inhalation therapy
- Injections: IM, SC, IV
- Instillation (eye, ear, nasal drops)
- Suppositories and enemas
- Care before and after drug administration
- Precautions and rights of drug administration
 - Right patient, dose, route, time, drug, documentation

4. Role of Nursing Assistant in Pharmacology

- Drug compliance and patient education
- Storage of drugs at sub-centre level
- Safe handling and disposal of expired drugs
- Reporting adverse drug reactions
- Maintaining drug stock and records

MICROBIOLOGY SYLLABUS

1. Introduction to Microbiology

- Definition and importance
- History of microbiology
- Classification of microorganisms:
 - Bacteria
 - Viruses
 - Fungi
 - Parasites
- Difference between pathogenic and non-pathogenic organisms

2. Common Microorganisms and Diseases

- Bacterial infections: Tuberculosis, Typhoid, Cholera
- Viral infections: Hepatitis, HIV/AIDS, Measles
- Fungal infections: Ringworm, Candidiasis
- Parasitic infections: Malaria, Worm infestations
- Modes of transmission: direct, indirect, vector-borne
- Carriers and reservoirs



3. Immunity and Immunization

- Types of immunity: natural, acquired, active, passive
- Antigens and antibodies
- Principles of immunization
- National Immunization Schedule
- Cold chain and vaccine storage
- Role of Nursing Assistant in immunization
- Handling of vaccines and maintaining immunization records

4. Infection Control and Prevention

- Hand hygiene and surgical asepsis
- Use of PPE (gloves, masks, gowns)
- Disinfection and sterilization techniques
- Waste segregation and disposal (color coding)
- Control of hospital-acquired infections (HAIs)
- Isolation precautions
- Role of Nursing Assistant in infection prevention at sub-centre and community

PRACTICAL

PHARMACOLOGY - PRACTICAL SYLLABUS

➤ Drug Handling & Preparation

1. Identifying common drugs by name, category, and use
2. Calculating correct dosage (basic math skills)
3. Reading and interpreting prescriptions
4. Checking expiry date and storage conditions
5. Organizing drugs in medicine tray or kit
6. Labelling and storing drugs properly (cool/dry storage)
7. Checking for drug discoloration or spoilage
8. Maintaining drug stock register at sub-centre
9. Identifying and segregating expired drugs for disposal

➤ Drug Administration Techniques

1. **Oral medication administration** – tablets, syrups, drops
2. **Topical application** – ointments, creams, powders
3. **Injection techniques** (*under supervision*):
 - Intramuscular (IM)
 - Subcutaneous (SC)
 - Intradermal (ID)



4. **Instillation techniques** – eye, ear, nasal drops
5. **Suppository insertion and enema administration**
6. Use of sterile syringe and ampoule opening
7. Pre- and post-drug administration precautions
8. Observing and reporting side effects
9. Educating patient/family on drug compliance

➤ **Emergency Drug Use (Demo-Based)**

1. Identifying emergency drugs (e.g., adrenaline, atropine)
2. Assembling emergency drug tray
3. Role in preparation and assistance in emergencies
4. Maintenance of emergency drug register

➤ **Patient Education & Record Keeping**

1. Educating patient on dosage, schedule, and side effects
2. Counseling on Iron, Calcium, Vitamin supplements during pregnancy
3. Maintaining **medication chart**
4. Reporting **adverse drug reactions (ADR)**
5. Filling **drug administration records/logbook**

MICROBIOLOGY – PRACTICAL SYLLABUS

➤ **Hand Hygiene & Infection Control**

1. **Handwashing technique (6 steps)** – WHO protocol
2. **Surgical hand scrub** (demonstration-based)
3. **Use of PPE** – gloves, mask, apron/gown
4. Cleaning and disinfection of instruments
5. Sterilization methods (boiling, autoclave, dry heat)
6. Disinfection of surfaces (e.g., delivery bed, thermometer)
7. Cleaning of thermometer after use (soap/alcohol)
8. Handling and safe disposal of soiled linen
9. Decontamination of spills (blood/body fluids)

➤ **Biomedical Waste Management**

1. Waste segregation using color-coded bins
2. Sharp disposal – handling used needles/syringes
3. Preparation of 0.5% chlorine solution for disinfection
4. Use of puncture-proof containers for sharps



5. Transporting and disposing biomedical waste safely

➤ **Cold Chain & Immunization Practice**

1. Handling and storing vaccines in **cold box/ice-lined refrigerator**
2. Use of **Vaccine Carrier** during outreach
3. Vaccine reconstitution under aseptic precautions
4. Checking **Vaccine Vial Monitor (VVM)**
5. Administering vaccines using proper technique (e.g., BCG, OPV, DPT)
6. Safe handling of auto-disable syringes
7. Documentation in **immunization register**
8. Identification and reporting of **Adverse Events Following Immunization (AEFI)**

➤ **Observation of Microorganisms (*Lab or Visual Aids*)**

1. Viewing prepared slides of bacteria, viruses, fungi
2. Demonstration of bacterial culture plates
3. Identifying microbial growth in contaminated instruments