



SEMESTER – IV

PAPER CODE	SUBJECT NAME	THEORY HOURS	PRACTICAL HOURS	THEORY MARKS	PRACTICAL MARKS
CMS101	HANDLING ESSENTIAL DRUG	45 Min	1 Hrs.	50	50
CMS102	MANAGEMENT OF DISEASES	45 Min	1 Hrs.	50	50
CMS103	COMMON MEDICAL ALIMENT & THEIR TREATMENT	45 Min	1 Hrs.	50	50
CMS104	SOCIAL & PREVENTIVE MEDICINE	45 Min	1 Hrs.	50	50

HANDLING ESSENTIAL DRUG

Theory Syllabus

1. Introduction to Essential Drugs

- Definition of essential drugs (WHO & Government of India perspective)
- Importance and objectives of essential drug concept
- National Essential Drug List (EDL)
- Role of CMS & ED practitioners in essential drug distribution

2. Classification of Essential Drugs

- Drugs for common illnesses (fever, pain, infections, diarrhea)
- Antipyretics, analgesics, antibiotics, antacids, antihistamines
- Antidiarrheals, oral rehydration salts (ORS), antifungals, antiseptics
- Emergency drugs – adrenaline, atropine, etc.
- Common pediatric and geriatric medicines

3. Drug Dosage and Administration

- Units of measurement (mg, ml, IU, etc.)
- Calculation of correct dose (adult & pediatric)
- Routes of drug administration: oral, topical, injectable
- Dose frequency and duration
- Reading and interpreting prescriptions

4. Drug Storage and Handling

- General principles of drug storage (temperature, humidity, light)
- Drug categorization for storage (antibiotics, injectables, syrups, etc.)
- Storage of vaccines and cold chain maintenance basics
- Handling of emergency drugs and first aid kits
- FIFO & FEFO methods (First In First Out, First Expiry First Out)



5. Dispensing and Labeling

- Correct dispensing practices
- Proper labeling of drugs (name, dose, timing, expiry)
- Counseling patients on drug usage
- Preventing medication errors

6. Rational Use of Drugs

- Definition and importance
- Avoiding polypharmacy
- Use of antibiotics – when and when not to prescribe
- Resistance and consequences of irrational use
- Referral in case of adverse drug reactions

7. Drug Regulations and Legal Aspects

- Schedule H, Schedule X drugs – handling restrictions
- Over-the-counter (OTC) vs. prescription drugs
- Ethical guidelines in dispensing drugs
- Record maintenance for dispensed drugs
- Role of regulatory bodies (CDSCO, state drug authorities)

8. Common Drug Side Effects & Management

- Identification of common side effects and allergic reactions
- Immediate management of adverse drug events
- Importance of pharmacovigilance and reporting

9. Drug Kit Familiarization

- Components of primary healthcare drug kit
- Role of CMS & ED practitioner in kit usage
- Maintenance and timely replenishment

10. Patient Communication and Education

- Instructing patients on correct drug intake
- Advising on missed doses, food-drug interactions
- Educating on completing the full course of medication (especially antibiotics)
- Counseling for chronic medications (BP, sugar, etc.)

Practical Syllabus

1. Drug Identification & Classification

- Identifying essential drugs used in PHC settings
- Sorting drugs into categories: analgesics, antibiotics, antipyretics, etc.
- Reading drug labels and recognizing expiry/manufacture dates

2. Drug Storage & Inventory Management



- Demonstrating proper drug storage (cool, dry, labeled shelves)
- FIFO & FEFO method application (First In First Out / First Expiry First Out)
- Arranging drugs according to type and usage
- Maintenance of **stock register** and **daily drug issue register**

3. Drug Dosage Calculation & Administration

- Demonstrating adult & pediatric dose calculation (weight/age-based)
- Practical use of measuring devices (syringes, droppers, measuring cups)
- Oral vs topical vs injectable route administration simulation
- Mock preparation of ORS and reconstitution of dry syrups

4. Drug Dispensing & Labeling

- Step-by-step demonstration of dispensing tablets, syrups, ointments
- Writing patient-specific drug labels (name, dose, timing, duration)
- Demonstrating safe handling of emergency drugs (e.g., adrenaline)
- Ensuring hygiene while dispensing (use of gloves, clean surfaces)

5. Patient Counseling & Communication

- Role-play: Explaining drug usage to illiterate/rural patients
- Instructions for missed doses, food-drug interactions
- Advising patients on completing full course of antibiotics
- Creating awareness about overuse and misuse of medications

6. Adverse Drug Reaction (ADR) Management

- Identifying common side effects (rash, nausea, allergy)
- Demonstrating steps for managing minor ADRs
- Mock referral procedure in case of serious drug reactions

7. Ethical & Legal Aspects in Drug Handling

- Observation of Schedule H / Schedule X drug rules
- Mock entries in drug register for prescribed medications
- Demonstrating safe disposal of expired or damaged drugs

8. Field Training & Community Practice

- Observing drug storage at PHC/Sub-centre
- Participating in essential drug distribution during VHND/health camps
- Demonstration of emergency drug kit usage during first aid scenarios

MANAGEMENT OF DISEASES

Theory Syllabus



1. Introduction to Disease Management

- Definition and classification of diseases
- Communicable vs Non-communicable diseases
- Acute vs Chronic diseases
- Principles of disease diagnosis and management
- Role of CMS & ED practitioner in primary disease care

2. Management of Communicable Diseases

(A) Respiratory Tract Infections

- Common cold, influenza
- Acute bronchitis, pneumonia
- Tuberculosis (early signs, referral, DOTS basics)

(B) Gastrointestinal Infections

- Diarrhea, dysentery
- Gastroenteritis
- Typhoid, cholera
- Worm infestations

(C) Vector-borne Diseases

- Malaria: symptoms, diagnosis, treatment, prevention
- Dengue and chikungunya: symptomatic treatment and referral
- Filariasis and Japanese encephalitis (overview and referral protocol)

(D) Skin & Fungal Infections

- Scabies, ringworm, dermatitis
- Basic treatment with topical and oral medications

(E) Sexually Transmitted Infections (STIs)

- Identification and basic counseling
- Referral for further treatment

3. Management of Non-Communicable Diseases (NCDs)

- Hypertension: signs, BP monitoring, lifestyle advice, basic drugs
- Diabetes: symptoms, blood sugar testing, drug/diet advice
- Asthma: triggers, inhaler usage, emergency care
- Anemia (especially in women and children): diagnosis and iron supplementation
- Arthritis and joint disorders: symptomatic treatment, patient education

4. First Aid & Emergency Management

- Fever, pain, bleeding, burns
- Wound care and minor injuries



- Fainting, convulsions, shock
- Snake bite and dog bite (initial care and referral)
- Handling poisoning cases

5. Pediatric Disease Management

- Fever, cough, diarrhea in children
- Worm infestations
- Vitamin deficiencies
- Growth monitoring and immunization schedule
- Danger signs and referral

6. Reproductive and Maternal Health

- Management of common gynecological symptoms (leucorrhoea, UTI)
- Antenatal and postnatal care (minor ailments, anemia)
- Family planning services and counseling
- Referral for complicated pregnancies and deliveries

7. Common Ophthalmic & ENT Conditions

- Conjunctivitis, eye infections
- Ear pain, wax impaction, throat infections
- First aid for foreign bodies in eye, ear, or nose

8. Mental Health and Counseling

- Basic identification of anxiety, depression, addiction
- Supportive counseling techniques
- Referral and follow-up of psychiatric cases

9. Geriatric Care

- Common problems in elderly: joint pain, BP, sugar, insomnia
- Health check-ups and follow-up advice
- Nutrition and care tips for the aged

10. Record Keeping and Referral

- Maintaining patient case sheets and disease registers
- Referral slips and follow-up documentation
- Monitoring drug response and side effects

Practical Syllabus

1. Patient History & Examination

- Practicing complete patient history taking
- Measuring vital signs: Temperature, Pulse, BP, Respiratory Rate
- Identifying symptoms: cough, fever, pain, breathlessness, etc.



- General physical examination techniques

2. Identification & Management of Common Illnesses

- Diagnosing and treating:
 - Fever (malaria, viral, typhoid)
 - Diarrhea and dehydration (ORS preparation and use)
 - Respiratory infections (cold, cough, pneumonia)
 - Skin infections (fungal, scabies)
- Monitoring improvement and drug response

3. Non-Communicable Diseases (NCDs)

- BP measurement (manual & digital) and hypertension management
- Capillary blood glucose test using glucometer
- Recording and interpreting sugar levels
- Counseling on diet, lifestyle, and medication adherence for diabetes & hypertension

4. Pediatric Case Handling

- Measuring weight, height, MUAC for child growth monitoring
- Detecting common childhood diseases (fever, worm infestation, cough, cold)
- Administration of deworming drugs and basic nutritional advice
- Identifying signs of malnutrition and referral when needed

5. Reproductive & Maternal Health

- Antenatal check-up practice: BP, weight, fetal movement inquiry
- Identifying minor pregnancy-related complaints (nausea, backache, anemia)
- Referral of high-risk pregnancies
- Counseling on iron, calcium supplements, and diet

6. Basic First Aid & Emergency Management

- Management of minor injuries, cuts, and burns
- Handling fainting, minor bleeding, fever, and convulsions
- Basic care for snake bite, dog bite, and poisoning before referral
- Demonstrating use of first aid kit & emergency drugs

7. Health Counseling & Disease Education

- Educating patients about disease prevention and hygiene
- Explaining drug course and follow-up requirements
- Demonstrating the importance of immunization, nutrition, and lifestyle changes
- Conducting mock patient counseling sessions

8. Use of Essential Drugs in Disease Management

- Selecting and dispensing proper drugs for common diseases
- Explaining dosage, timing, and side effects to patients



- Writing simple prescriptions and labels
- Safe storage and handling of frequently used medicines

9. Referral and Follow-Up

- Identifying red flag signs requiring referral
- Preparing and filling referral slips properly
- Simulated referral of serious cases (e.g., suspected TB, uncontrolled diabetes)
- Recording follow-up visits and patient feedback

COMMON MEDICAL AILMENT & THEIR TREATMENT

Theory Syllabus

1. Introduction to Common Ailments

- Definition of common ailments
- Role of CMS & ED practitioner in diagnosis and basic treatment
- Importance of early identification and community-based care

2. Fever & Febrile Conditions

- Types of fever: acute, intermittent, chronic
- Causes: viral, bacterial, malaria, typhoid, etc.
- Symptom identification and use of antipyretics
- Referral indicators for prolonged fever

3. Respiratory Conditions

- Common cold and flu: symptomatic treatment
- Cough (dry, productive): identification and treatment
- Bronchitis, asthma: inhaler usage, emergency care
- Pneumonia: recognition, basic care, and referral

4. Gastrointestinal Disorders

- Diarrhea and dehydration: ORS preparation and use
- Constipation: dietary advice and laxative usage
- Vomiting and nausea: causes and treatment
- Worm infestation: diagnosis and deworming

5. Skin Ailments

- Fungal infections: ringworm, candidiasis – antifungal creams/tablets
- Scabies and lice: topical treatments and hygiene education
- Boils and minor wounds: antiseptic care
- Allergic reactions: antihistamines and identification of cause

6. Musculoskeletal Issues



- Body ache, back pain, joint pain – NSAIDs and massage
- Arthritis: types, symptoms, pain management
- Strains and sprains: cold compress, rest, analgesics

7. Headache & Migraine

- Common causes and differentiation
- Use of analgesics and hydration tips
- Lifestyle and dietary triggers

8. Eye & Ear Conditions

- Conjunctivitis: causes and treatment with eye drops
- Foreign body removal (basic level only)
- Earache and wax impaction: ear drops, referral if needed

9. Urinary Tract Infections (UTI)

- Identification of burning micturition, frequency
- Use of urinary alkalizers and antibiotics
- Hygiene counseling and fluid intake

10. Minor Injuries & First Aid

- Cuts, wounds, burns: cleaning, dressing, topical antiseptics
- Minor bleeding: pressure application and dressing
- Insect bites and stings: local care and antihistamines

11. Anemia and Nutritional Deficiencies

- Signs and symptoms of anemia
- Iron, folic acid, vitamin supplements
- Nutritional counseling (especially for women and children)

12. Dental & Oral Problems

- Toothache, gum infections, ulcers
- Oral hygiene education
- Referral in case of severe pain or swelling

13. Female Reproductive Ailments

- Leucorrhea, menstrual irregularities, lower abdominal pain
- Basic treatment and counseling
- Importance of hygiene and referral if needed

14. Common Pediatric Ailments

- Fever, cold, cough, diarrhea in children
- Nutrition, growth monitoring, immunization awareness



- Pediatric dosage calculation

15. Counseling & Preventive Care

- Health education for hygiene, nutrition, and sanitation
- Preventing self-medication and misuse of antibiotics
- Promoting regular health check-ups

Practical Syllabus

1. Patient Examination

- Practice of history taking and symptom identification
- Checking vital signs (Temp, Pulse, BP, Respiration)
- Clinical observation of skin, throat, eyes, and abdomen

2. Fever Management

- Use of digital/mercury thermometer
- Identification of fever type (viral, malaria, typhoid)
- Use of antipyretics (paracetamol) and tepid sponging
- Referral criteria for prolonged/high fever

3. Respiratory Ailments

- Auscultation practice (if tools available)
- Managing common cold, cough with syrups, steam inhalation
- Use and demonstration of inhalers (for asthma)
- Recognizing signs of pneumonia or TB for referral

4. Diarrhea & GI Disorders

- Preparation and administration of ORS
- Use of antispasmodics, antiemetics
- Identifying dehydration signs
- Hygiene instruction for patients

5. Skin Conditions

- Application of antifungal creams/lotions
- Cleaning and dressing minor wounds or boils
- Demonstration of scabies and lice treatment
- Personal hygiene counseling

6. Pain & Body Aches

- Use of NSAIDs and local ointments
- Identifying non-specific body ache and muscular pain
- Guidance on rest, hydration, and posture

7. Headache & Migraine



- Use of analgesics and hydration techniques
- Identifying migraine vs. simple headache
- Relaxation techniques and stress management advice

8. ENT & Eye Problems

- Use of eye drops for conjunctivitis
- Use of ear drops for wax removal or earache
- First aid for foreign body in eye/ear
- Referral for chronic ENT issues

9. UTI Management

- Recording symptoms (burning, urgency, pain)
- Use of urinary alkalizers and antibiotics
- Fluid intake and hygiene counseling

10. First Aid for Minor Injuries

- Cleaning wounds and applying antiseptic
- Bandaging techniques
- First aid for minor burns and insect bites
- Identification of red-flag signs for referral

11. Anemia & Nutrition

- Recognizing symptoms (fatigue, pallor)
- Prescribing iron, folic acid tablets
- Dietary counseling (iron-rich foods)

12. Common Pediatric Ailments

- Calculating pediatric dosages
- Use of paracetamol, ORS, deworming syrup
- Monitoring child growth (weight, MUAC)

13. Reproductive Ailments in Females

- Identifying symptoms like leucorrhea, menstrual irregularities
- Basic treatment and hygiene guidance
- Referral in case of chronic or painful conditions

14. Health Education & Counseling

- Educating patients about hygiene and disease prevention
- Demonstrating correct medicine usage
- Counseling against misuse of antibiotics
- Promoting timely medical consultation



SOCIAL & PREVENTIVE MEDICINE

Theory Syllabus

1. Introduction to Social Medicine

- Definition, concept, and scope of Social Medicine
- Relationship between medicine and society
- Social factors affecting health and disease
- Social determinants of health (housing, education, sanitation, etc.)

2. Preventive Medicine: Concept & Application

- Definition and levels of prevention:
 - Primordial
 - Primary
 - Secondary
 - Tertiary
- Natural history of disease
- Modes of disease prevention (health promotion, specific protection)

3. Epidemiology

- Definition and uses of epidemiology
- Measurement of health and disease (rates, ratios, proportions)
- Types of epidemiological studies (descriptive, analytical, experimental)
- Surveillance and outbreak investigation basics
- Common screening methods in community practice

4. Environment and Health

- Water sources and purification methods
- Air pollution: causes, effects, prevention
- Waste disposal and sanitation
- Vector control: mosquitoes, flies, rodents
- Housing standards for healthy living

5. Nutrition & Health

- Nutrients: proteins, carbohydrates, fats, vitamins, minerals
- Balanced diet and nutritional requirements
- Malnutrition: PEM, anemia, vitamin deficiencies
- National nutritional programs (e.g., ICDS, Mid-Day Meal)

6. Communicable Diseases

- General principles of control & prevention
- Modes of transmission and prevention strategies
- Detailed study of:



- Tuberculosis
- Malaria
- Dengue
- Typhoid
- Diarrheal diseases
- Measles
- HIV/AIDS
- Hepatitis
- Role of immunization and isolation

7. Non-Communicable Diseases (NCDs)

- Causes and prevention of:
 - Hypertension
 - Diabetes
 - Cancer
 - Obesity
- Lifestyle modification and early detection
- Screening programs and counseling

8. Family and Community Health

- Concept of family health care
- Maternal and child health (MCH)
- Immunization schedule (UIP)
- Growth monitoring
- Family planning methods

9. Occupational Health

- Occupational hazards and diseases
- Industrial health services
- Prevention and control measures
- Health education for workers

10. Health Education & Communication

- Definition, methods, and principles
- Role of IEC in disease prevention
- Use of audio-visual aids and group discussion
- Community participation in health

11. Health Programs & Policies

- Overview of National Health Programs:
 - NRHM
 - RNTCP (TB)
 - NVBDCP (Malaria)
 - NACP (HIV/AIDS)
 - NIDDCP (Iodine)
- Public health infrastructure: Sub-Centre, PHC, CHC



- Health management information system (HMIS)

12. Demography & Vital Statistics

- Definitions: birth rate, death rate, fertility rate
- Census and population trends in India
- Health indicators and their importance
- Use of statistics in health planning

13. Immunization & Cold Chain Management

- Vaccines: types, storage, and administration
- Cold chain system – maintenance and equipment
- National Immunization Schedule
- Adverse Event Following Immunization (AEFI) management

14. Disaster Management & Public Health Emergencies

- Definition and types of disasters
- Role of CMS & ED practitioner in disaster response
- Basic triage and emergency health services
- Disease prevention in disaster-affected areas

Practical Syllabus

1. Assessment of Social Factors

- Recording patient's socioeconomic, housing & education status
- Identifying environmental factors affecting health
- Case documentation based on social determinants

2. Practice of Preventive Medicine

- Application of health education to prevent disease
- Demonstrating use of masks, gloves, and hygiene in community settings
- Organizing awareness activities on handwashing, sanitation, etc.

3. Epidemiological Observations

- Filling basic epidemiological forms (case sheets, surveys)
- Measuring disease incidence in a small area
- Reporting suspected outbreaks to PHC

4. Water, Sanitation & Environment

- Demonstrating safe drinking water storage and purification
- Field visit to local water supply/treatment unit
- Identification and reporting of unhygienic areas
- Demonstration of proper waste disposal techniques

5. Nutrition Education



- Diet chart preparation for children, pregnant women, anemic patients
- Demonstrating nutritional assessment (weight, BMI, MUAC)
- Educating patients on balanced diets

6. Communicable Disease Control

- Isolation and referral procedure practice
- Use of mosquito nets, repellents, and source reduction activities
- Explaining transmission cycles and control of TB, malaria, dengue
- Promoting cough hygiene and mask usage

7. Non-Communicable Disease (NCD) Screening

- Blood pressure & blood sugar recording
- Patient counseling for lifestyle modification
- Identifying obesity and teaching weight management

8. Family Health & MCH

- Growth monitoring in children (weight & height charting)
- Counseling on immunization and breastfeeding
- Educating mothers on ANC/PNC care
- Demonstrating usage of contraceptives

9. Occupational Health

- Identifying common occupational risks in field visits
- Advising on prevention of occupational diseases
- Basic PPE demonstration for workers

10. Health Education & Communication

- Practicing health talks in small groups (hygiene, nutrition, etc.)
- Using posters, charts, flashcards for education
- Organizing community awareness programs

11. Cold Chain & Vaccine Handling

- Demonstrating cold chain equipment (Ice-lined refrigerator, cold boxes)
- Safe vaccine storage and handling
- Monitoring vaccine temperature using thermometers

12. Vital Statistics

- Calculating simple birth/death rate using given data
- Collecting health data from a field survey
- Preparing basic health reports

13. Disaster Preparedness



PARAMEDICAL EDUCATION & TRAINING COUNCIL

Ch. No.157/1, Near Laxmi Nagar, Metro Station Gate No 1, Vikas Marg, Delhi-92

- Preparing emergency first aid and supply kits
- Basic triage demonstration (categorizing patients)
- Role play/drill for flood, epidemic response