

THE TAMIL NADU Dr. MGR MEDICAL UNIVERSITY, CHENNAI

600 032

OPHTHALMIC NURSING ASSISTANT PROGRAMME

I year

	Subject
Paper – I	Anatomy, Physiology, & Biochemistry
Paper – II	Pharmacology & Microbiology
Paper – III	English

EXAMINATION PATTERN FOR OPHTHALMIC NURSING ASSISTANT PROGRAMME

FIRST YEAR:

Sl. No.	Subject Title	I A		University Exam		Practical	
		Max	Min	Max	Min	Max	Min
1.	Anatomy, Physiology, Biochemistry	50	25	100	50		
2.	Pharmacology & Microbiology	50	25	100	50		
3.	English	50	25	100	50		

II year

OPHTHALMIC NURSING ASSISTANT PROGRAMME

	Subject
Paper – I	Ocular diseases
Paper – II	Ophthalmic surgical procedures
Paper – III	Ophthalmic nursing in health promotion & Health Care.

EXAMINATION PATTERN FOR OPHTHALMIC NURSING ASSISTANT PROGRAMME

SECOND YEAR:

Sl. No.	Subject Title	I A		University Exam		Practical	
		Max	Min	Max	Min	Max	Min
1.	Ocular diseases	50	25	100	50		
2.	Ophthalmic surgical procedures	50	25	100	50		
3.	Ophthalmic nursing in health promotion & Health Care.	50	25	100	50		

SYLLABUS FOR OPHTHALMIC NURSING ASSISTANT PROGRAMME

OCULAR ANATOMY

Theory - 50 hours
Demonstration – 20 hours
Total - 70 hours

Learning objectives :

- To discuss regarding ocular anatomy and specific care
- To understand the various structures in the eye.
- To discuss standard nursing care for the preparation of pre & post operative patient

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	50	20	• Describe anatomy & embryology of sclera, cornea, uvea, retina & visual pathway.	1. Ocular Embryology:- Embryological development of various structure of eye ball and accessory structure of eyeball. 2. Anatomy of orbit:- Bony orbit, orbital fascia, orbital nerves. 3. Anatomy of diff. layers of eyeball – Cornea, structure of lens, sclera, Anterior chamber, Retina. 4. Anatomy of Ocular glands :- Lacrimal glands, conjunctival glands, nerve supply, Blood supply. 5. Anatomy of ocular adnexa:- Structure of the lids, pupillary and Ciliary muscle.	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students

OCULAR PHYSIOLOGY

Theory - 50 hours
Demonstration – 20 hours
Total - 70 hours

Learning objectives :

- To discuss regarding ocular physiology and specific care
- To understand the various structures in the eye.
- To discuss standard nursing care for the preparation of pre & post operative patient

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	50	20	• Describe Protective Mechanism in the eye, extraocular muscle, physiology, lens metabolism, Refractive Errors, Visual Acuity, Color Vision	Ocular Physiology 1. Structure and functions of cornea, Retina, Lens, Pupil. 2. Ocular movements – Monocular movement, Binocular movement 3. Physiology of Accommodation of eye. 4. Physiology of colour vision & colour blindness. 5. Visual acuity, light and dark adaptation, Binocular vision. 6. Optic nerve tract. 7. Electro physiology of Eye – ETG, EOG, VER.	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students

COMMUNICATION SKILLS

Theory - 20 hours
Demonstration – 10 hours
Total - 30 hours

Learning objectives :

- To effectively communicate with the patient and the attendant
- To understand the do and don't of communication.
- To know the barriers of communication

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	20	10	• Describe effective communication according to the situations.	Communication skills, various types of communication, barriers in communication and effective communication, (Hindi classes)	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students

PHARMACOLOGY INCLUDING OCULAR PHARMACOLOGY

Theory- 30 hours

Total - 30 hours

Learning objectives :

- To know effects and side effects of drugs.
- To monitor the patients after the administration of drugs
- To know about the ophthalmic medications.
- To store the drugs as per the drug rules.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	30		• Describe Mechanism of drug action, Dose response relationship, Tachyphylaxis, Pharmacokinetics of drug absorption, distribution, biotransformation; Principles of ocular pharmacology, Optometric diagnostic drugs	Pharmacology including ocular pharmacology 1. Nature of Drug, Drug administration - General and Ocular 2. Bio-availability of drug 3. Drug metabolism or biotransformation, pharmacodynamics, drug toxicity. 4. Preparation and packaging of ophthalmic drugs. 5. Ophthalmic diagnostic drugs 6. Ophthalmic drugs – antibiotics, corticosteroids, anaesthetics, viscoelastics agents, Antiglaucoma drugs, Drugs for dry eye, ophthalmic prescriptions.	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students

MICROBIOLOGY

Theory- 30 hours

Practical-10 hours

Total - 40 hours

Learning objectives :

- To discuss characteristics of micro organisms including viral and bacterial eye infections.
- To discuss measures to control the spread of micro organisms in the health care settings.
- To discuss processes of infection and epidemiology.
- To explain wound healing process and body's immune system.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	30	10	• Describe Classification of microbes; structure and physiology of microbial cell; infection and immunity; host parasite relationship; microbiology of milk, air, water and food; physical and chemical methods of controlling microbes; experiments for isolation, cultivation, physiological and biochemical characterization of microbes	General concept of bacteria, classification, staining reactions, bacterial growth, reproduction. Antibiotics, Bacteriostatic and bactericidal effects. Elementary idea about bactericidal agents – Phenol, alcohol, sterilization, pasteurization. Elementary idea of virus, replication, Herpes virus, HIV etc. Bacterial culture, Pathogenic mechanisms common to external ocular infection process.	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students
- Lab postings

BIO-CHEMISTRY

Theory- 30 hours
Practical-10 hours
Total - 40 hours

Learning objectives :

- To discuss regarding chemical components.
- To know about the metabolism of chemical components.
- To discuss ocular biochemistry processes.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	30	10	• Describe Chemistry and functions of constituents of cells and tissues; introduction to enzymes; metabolism of carbohydrates, lipids, aminoacids, nucleic acids and protein synthesis; vitamins and hormones	1. Classification of carbohydrates, glycolysis, TCA cycle glycogen metabolism, Blood sugar level. 2. Classification proteins, aminoacids, urea cycle, transamination. 3. Classification lipids – oxidation, ketogenesis. 4. Functions of vitamins and minerals. 5. Biochemical composition of cornea, nutrients and supply to cornea 6. Chemical composition of tears, Tear film, Tests for film adequacy. 7. Biochemical composition of Lens, Lens protein, Lens metabolism, Cataract – Biochemical defects. Antioxidant mechanism in the lens. 8. Biochemistry of visual proteins – rhodopsin, iodopsin.	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students
- Lab postings

OCULAR DISEASES

Theory- 30 hours
Total - 30 hours Learning

objectives :

- To discuss about various ocular diseases and disorders.
- To know about the signs and symptoms of various ocular diseases.
- To know about the various treatment modalities.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	30		• Describe Diseases affecting the eyelids & adnexa including orbit, ocular motility, refractive errors, diseases affecting the cornea, sclera - Diseases affecting uveal tract, retina, vitreous, lens, glaucoma, optic nerve, cranial nerves connected with vision and visual apparatus and ocular manifestation of systemic diseases.	1. Anterior segment ocular diseases. 2. Disease of the lids. 3. Diseases of the lachrymal apparatus – Dry Eye, Disease of the lachrymal Gland; Disease of the lachrymal passages. 4. Disease of the conjunctive, conjunctivitis. 5. Disease of the cornea – Inflammation of the cornea, keratitis, deep keratitis, vascularization of cornea, opacities of the cornea, corneal degeneration, corneal dystrophy, corneal injuries. 6. Disease of sclera. 7. Disease of the Iris. 8. Disease of the choroid – congenital anomalies, Tuberculosis, degenerated diseases. 9. Glaucoma; - Types causes, surgery. 10. Disease of the lens. 11. Disease of the Vitreous humor. 12. Disease of the Retina. 13. Disease of the optic nerve. 14. Symptomatic disturbances of visual functions – Night blindness, day blindness, Defects in color vision, word blindness. 15. Neuro – eye disease – Neuritis, sclerosis, Nystagmus, Disorders of Chiasma.	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students

IN-SERVICE TRAINING

Theory- 40 hours
Practical- 40 hours
Total - 80 hours

Learning objectives :

- To know about the ward & OT standard practices.
- To discuss pre and post operative care given to the respective patients.
- To manage various kind of situation in the health care.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	40	40	Describe Theory and practice of ophthalmic training pertaining to patient care in terms of admission procedure, preoperative preparation and postoperative care according to the types of surgery as well as type of anesthesia to be used, discharge of patients, patient instruction. Nursing Consideration in Ophthalmic Disorders, Nursing aspects in fluid & electrolytes, Pain Avoidance, Mental health & medical psychology, Hot & cold application, Administrations of medications, injections & infusions, introduction to health care system., Medical & Surgical asepsis, Artificial feeding, Enema & bowl wash, Catherisation. Wound care.	Introduction to Ophthalmic - Nursing and principles, Theory and practice of ophthalmic assistant pertaining to inpatient care in terms of examining basic functions such as pulse, blood pressure, temperature, respiration, bed making, bed sore & management, body positioning and alignment, transferring patients, training in first aid, CPR and hygiene, inhalation - Oxygen administration, feeds & lavage,	- Lecture discussion - Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students
- Ward/OPD/OT postings (log book)

MEDICAL AND NURSING RECORDS

Theory- 30 hours
Practical- 10 hours
Total - 40 hours

Learning objectives :

- To know about the various kind of records used in the hospital.
- To discuss about the reports & records.
- To maintain, store and to use records.
- To know about EMR procedures

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	30	10	• Describe to fill the various kind of formats available in the hospitals • Describe medical record • Describe confidentiality in maintaining medical record.	Introduction to Medical Records; history; need for medical record; content of medical records; special records; formats, forms design & control; filing methods, storage & retention; nomenclature & classification systems; indexes & registers; legal aspects of medical records; quality assurance; recent advantages in medical systems, EMR	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students
- Ward/OPD/OT postings (log book)

PRINCIPLES OF EMERGENCY PATIENT CARE

Theory- 30 hours

Practical- 10 hours

Total - 40 hours

Learning objectives :

1. To know about the emergency care
2. To identify the ophthalmic emergencies
3. To give time intervention and care

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	30	10	• Describe about ophthalmic emergency management • Prioritizing the patient and delivering the care according to the severity of injury.	Definition of emergency; use of sedation and local, region and general anaesthesia in the emergency of pain; various routes of intravenous access in emergency patients; basic life support techniques, provision of emergency care, legal aspects of emergency care, emergency care for burns, introduction to emergency drugs including its importance, maintenance and handling	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students
- Ward/OPD/OT postings (log book)

INTRODUCTION TO OPHTHALMIC OUT PATIENT CARE

Theory- 30 hours
Practical- 10 hours
Total - 40 hours

Learning objectives :

- To know various diagnostic procedures conducted in the OPD.
- To discuss treatment modalities and management procedures for different ocular conditions.
- To discuss about rehabilitation and counseling using effective communication skills.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	30	10	• Describe History Taking, vision check, refraction and IOP measurement, assisting ophthalmologists in outpatient procedures-both surgical and laser, assisting the ophthalmologist in FFA.	Diagnostic procedures in eye , PDT FFA , laser , LASIK, counseling and rehabilitation, specimen collection – lab	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students
- Ward/OPD/OT postings (log book)

OPHTHALMIC SURGICAL PROCEDURES

Theory- 20 hours
Practical- 20 hours
Total - 40 hours

Learning objectives :

- To know about do's and don'ts in the OT including aseptic techniques
- To discuss about Sterilisation, disinfection and microbiological surveillance of OT.
- To know about the various ophthalmic surgical procedures and emergency management.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	20	20	To be skilled in assisting various surgical procedures in the ophthalmic setup.	Various ophthalmic surgical procedures, Steps of surgeries,	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Vivo examinations
- Seminar by the students
- Ward/OPD/OT postings (log book)

FUNCTIONAL ENGLISH

Theory- 30 hours

Total - 30 hours

Learning objectives :

- To discuss about effective communication skills
- To prevent barriers in communication.
- To improve comprehensive and writing skills.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	30		• Describe Grammar in usage – Tenses, Prepositions, Phrasal words; Communication – Process, Speaking, Listening, Reading, Memory, Self image, Comprehension, Precise writing; Report writing etc.	Grammar in usage – Tenses, Prepositions, Phrasal words; Comprehension, Precise writing; Report writing.	• Lecture discussion • Presentations

Suggested activities for Evaluation

- Written examinations
- Viva examinations
- Seminar by the students

HEALTH CARE IN OPHTHALMIC HOSPITALS

Theory - 130 hours
Demonstration - 50 hours
Total - 180 hours

Learning objectives :

On completion of the course the student will be able to :

1. Describe the concept of ophthalmic health care.
2. Understand health policies, plans and programmes of the country.
3. Understand the concept of eye related problems of the community.
4. Appreciate the role of the health team.
5. Describe structure, function, characteristics and administrative set up of an ophthalmic hospital
6. Describe the purposes, principles and methods of health counseling .

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching -Learning Activities
	Th.	Demo			
1.	10		- Define health and explains its dimensions - List determinants of health - Define Ophthalmic Care - List components of eye related health care issues and primary applications of it.	Concept of Health - Healths and its changing concepts. - Dimensions of health. - Primary health care, definition, components, ophthalmic application.	- Lecture discussion - Posters
2.	10		- Describe health concepts and practices in ophthalmic set up. - Enumerate health related cultural beliefs and practices	Ophthalmic Health practices - Health concepts of people and health care providers. - Health behaviours, beliefs and cultural practices of ophthalmic hospitals. - Ethics and behaviour related to ophthalmic practices. - Method of counseling ophthalmic patients.	- Lecture discussion. - Practice session. - Demonstration
3.	15	5	- Describe National health problems - Explain specific health programmes at National and state levels.	Health problems and policies Overview of health problems of ophthalmic patients in India.	- Lecture discussion. - Participate in national health programs.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching -Learning Activities
	Th.	Demo			
				- Trends and development in national health programmes and policies - National health programmes and its implementation at community level. - Role and functions of ONA	vision screening.
4.	10	5	- Explain the organization of health services at different levels. - Describe the referral system. - Explain the role of National and International health agencies and Non-Governmental Organisations.	Health Organization - Organization of the hospital including rural health care, intervention centers, psychiatric facilities, sub acute care. - Organization of health care delivery system at different levels - Referral system - Health agencies: International: WHO, UNICEF, UNFPA, UNDP, World Bank, FAO, DANIDA, European Commission, Red Cross, US aid, UNESCO, Colombo plan, ILO, CARE etc.	- Lecture discussion. - Visits to multi specialty health units.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching -Learning Activities
	Th.	Demo			
				- National: Indian Red Cross, Indian Council for Child welfare - Non-Governmental organizations	
5.	5	2	Describe health team with special focus on ophthalmic health related issues.	Role of health team. - Team concept and Functions of the health team. - Role and Responsibilities of ONA - Code of ethics for ONA	- Lecture discussion. - Observation of activities rendered by the health team members.
6.	10	5	- Describe physical structure of village and urban area. - Identify social groups, organizations and leaders - Explain administrative setup at the village	Structure of community - Rural community- Characteristics, changes in the village community development, major rural eye related problems - Urban Community- Characteristics, changes and adjustments to urban environment, major urban problems.	- Lecture discussion. - Field visits: village mapping, slum mapping, - List their role in health care.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
			•	Constitution and role and role of Panchayat in health . • Structure of an urban community slum • Social groups organizations, leaders • Community resources	•
7.	10	5	• Describe the interaction between different groups 73rd and 74th amendments to Constitution and role and role of Panchayat in health . • Structure of an urban community slum • Social groups organizations, leaders • Community resources	Dynamics of community • Social process- individual and process of socialization. • Interaction between different social groups in the village. • Traditions and customs and their influence of health. • Social stratification: influence of class, caste and Race on health and health practices • Family and marriage: Types • Changes & legislations on family and marriage in India marriage acts	• Lecture discussion. • Interaction with different groups in the village. • Prepare a list of different customs and traditions.
8	25	6	• Demonstrate methods of community need assessment .	Community need assessment • Scope and Methods of community need assessment.	• Lecture discussion. • Preparation of Questionnaire • Field visits/

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
				Survey: Planning Preparation of tools: questionnaires, interview schedules, check list etc. - Community survey: Principles and methods: data collection, conducting interviews, focus group discussions (FGD) and case studies - Participatory learning for action (PLA) - Analysis of data, Preparation of report.	Conduct survey.
9	25	15	- Explain the concept, principles and methods of communication - Prepare simple and low cost aids of communication. - Conduct health education	Community methods & media - Principles, methods and Process of communication - Inter personal relationship (IPR): communication. With different groups and health team members. - Types and use of AV aids - Use of local folk methods and media for disseminating health messages,	- Lecture discussion. - Demonstration of different methods of communication. - Role/Play.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
				- BCC (Behavioural change communication), IEC (Information Education and communication): Aims, Scope, concept and approaches - Teaching learning process, concept, characteristics of learner - Planning of health education activities:	- Prepare health messages using different media and methods. - Preparation of IEC material. - Practice using one folk method. - Preparation of health education plan - Conduct BCC session - Evaluate and follow up of health education.
10	5	5	- Explain the concept, principles of counseling - Describe the technique of counseling . - Describe role of counselor	Counseling. - Concept ,. Principles and Techniques of counseling - Identifying needs and areas for counseling in the ophthalmic community. - Role of counselor	- Lecture discussion. - Conduct counseling session and follow up.
11	5	2	- State health conditions here rehabilitation is required. - List the various resources available in the ophthalmic institutions	Community based rehabilitation - ophthalmic Conditions needing rehabilitation - Community resources available - Educate individuals and family	- Lecture discussion. - Case discussion

Suggested activities for Evaluation

- Health organizational chart.
- Field visits.
- Demonstration of counseling technique.

HEALTH PROMOTION

Theory	- 125 hours
Demonstration	- 75 hours
Total	- 200 hours

Learning objectives :

On completion of the course the student will be able to :

1. Explain importance of nutrition in health and sickness.
2. Promote nutrition of a individual, family and community.
3. Explain principles of hygiene and its effect on the eye
4. Describe importance of environmental sanitation and waste management.
5. Promote mental health of individual & family

A Nutrition

Theory - 35 hrs
Demonstration - 30 hrs
Total - 65 hrs

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	10	5	- List essential nutrients. - Describe classification of food and their nutritive values and functions. - Explain importance of nutrition in health and sickness. Plan balanced diet for different age groups.	Essential nutrients - Importance of nutrition in health and sickness. - Essential nutrients, functions, sources and requirements. - Classification of foods and their nutritive value - Normal requirements at different ages. - Balanced diet for different age group	- Lecture discussion. - Explain using Models and Charts. - Exhibit raw food item showing balanced diet.
2.			- Identify malnutrition and nutritional deficiencies - Counsel women with anaemia. - Describe special diet for sick. - Explain role of ONAs	Nutritional problems Nutritional deficiencies: - Deficiencies, correction, treatment and referral-protein energy/malnutrition - Vitamin and mineral deficiencies: Nutritional anaemia in women - Under five nutrition - The role of ONAs in supplementary food. - Special diets of individuals for different age group.	- Lecture discussion. - Explain using Models and Charts. - Planning diets for eye related deficiency disorders.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
3.	5	5	- Assess nutritional status of individuals and family. - Identify local foods for enriching diet. - Identify good food habits from harmful food fats and customs.	Nutritional assessment - Methods of nutritional assessment of individual and family : - Identification of local food sources and their value in enriching diet. Food fats, Taboos, customs and their influence of health	- Lecture discussion. - Demonstration
4.	10	15	- Counsel for improving diet for the ophthalmic patients - Demonstrate safe preparation and cooking methods. - Explain methods of preservation of vitamins.	Promotion of nutrition - Planning diets and special diets for a family - Methods of using locally available foods for special diet. - Principles and methods of cooking - Promotion of kitchen gardens. - Food hygiene and safe preparation - Storage and preservation - Food adulteration - Precautions during festivals and Melas.	- Lecture discussion. - Plan diet for the family assigned. - Health education. - Visit a milk pasteurization plant. - Demonstration of various methods of cooking.

Suggested activities for Evaluation

- Cooking of special diet.
- Nutrition education to a group.
- Planning diet of a family assigned.

B. Human body and hygiene

Theory - 35 hrs
Demonstration - 20 hrs
Total - 55 hrs

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	20		- Describe the structure and functions of the various systems of body. - State functions of different organs.	The human body - Structure and functions of human body. - Body systems and their functions- digestive system, respiratory system, genito urinary system, cardiovascular system, nervous system, muscular system, endocrine system, special sensory organs.	- Lecture discussion. - Identification of body parts. - Explain using Models and Charts.
2.	10	8	- Understand importance of personal hygiene for self and individuals health . - Care for sick to maintain their personal hygiene and comfort	Hygiene of the body - Personal and individual hygiene: - Care of mouth, skin, hair and nails. - Sexual hygiene - Menstrual hygiene - Hygiene and comforts needs of the Sick: - Care of skin: Bath sponging, back care, care of pressure points - Care of hair: hair wash - Care of hand and nails: hand washing - Care of eyes: eye wash. - Mouth care: Elimination needs	- Lecture discussion. - Demonstration.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
3.	10	2	• State the basic human needs. • Explain importance of fulfilling these basic needs.	Optimal functioning of the body • Basic human needs - Rest, sleep, activity - Exercise, posture etc. - Food, eating and Drinking habits - Participation in social Activities. - Self-actualisation And spiritual need. - Inter personal and Human relations - Lifestyle and healthy Habits.	• Lecture discussion. • Health education regarding healthy life style.

Suggested activities for Evaluation

- Preparation of anatomy practical book
- Return demonstration of personal hygiene including care of various organs of body

C. Environmental Sanitation

Theory - 20 hrs
Demonstration - 15 hrs
Total - 40 hrs

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	5	2	Explain the importance of basic sanitation at home and in the community.	Environmental Sanitation - Environment and ecology for healthy living: basis sanitary needs. - Air, sunlight and ventilation. - Home environment: smoke, animals, water, drains and toilets etc	- Lecture discussion. - Case study.
2.	5	4	- Describe the importance of safe water for health. - Describe methods of water.	Safe water - Sources of water & characteristics of safe water-sources of contamination and prevention. - Purification of water for drinking: methods-small and large scale. - Disinfections of well, tube well tank and pond in a village. - Waterborne diseases and prevention.	- Lecture discussion. - Village mapping: water sources, drains, ponds and contamination areas. - Visit to a water - Purification plant

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
3.	5	4	• Explain the importance of safe disposal of waste and its role in prevention of diseases. • State the hazards due to waste	Disposal of excreta and waste. • Methods of excreta disposal-types of latrine. • Handling animal excreta. • Methods of waste disposal • Hazards due to waste.	• Lecture discussion. • Demonstration.
4.	5	5	• Involve community in sanitation activities . • Educate community for safe disposal of different types of waste.	Community participation • Drainage and preparation of soak pits. • Maintaining healthy environment within and around village-cleaning and maintenance of village drains, ponds and wells. • Common waste , excreta and animal waste-disposal in the village.	• Lecture discussion.

Suggested activities for Evaluation

- Purification of water at home, community
- Disinfections of a well/tube well
- Health education for use of sanitary latrine.

D. Mental Health

Theory - 30 hrs
Demonstration - 10 hrs
Total - 40 hrs

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	10	2	• Explain relationship between body and mind. • Identify the factors necessary for normal mental health. • Educate for promoting mental health.	Mental Health • Concept of mental health. • Body-mind Relationship. • Factors influencing mental health. • Characteristics of a mentally healthy person. • Developmental tasks of different age groups • Different defense mechanisms	• Lecture discussion. • Observation . • Use of questionnaire to do assessment for mental health status.
2.	3	2	• Identify causes of maladjustment . • Educate family in solving problems.	Maladjustment • Features of a maladjusted individual. • Common causes of maladjustment. • Counseling an individual, family and community.	• Lecture discussion. • Demonstration of counseling for maladjusted individual in the community.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
			- Identify them early and refer. - Guide family members in home care. - Counsel for prevention of mental illness.	- Types of mental illnesses and treatments. - Early detecting and referral of mentally ill. - Prevention of mental illness. - Home care and counselling. - Refer psychiatric emergencies	Visit to a mental hospital/ clinic.
4.	5	2	- Explain process of ageing. - Identify characteristics of elderly. - Provide need based care.	Old age care - Process of ageing physical, psychological changes. - Needs and problems. - Care of elderly at home. - Rehabilitation and agencies of caring elderly.	- Lecture discussion. - If available visit an old age home.

Suggested activities for Evaluation

- Assessment of mental health status of individual
- Care plan for an elderly person at home.

PRIMARY HEALTH CARE –
(PREVENTION OF DISEASE AND
RESTORATION OF HEALTH)

Theory - 150 hrs
Demonstration - 170 hrs
Total - 320 hrs

Learning objectives:

On completion of the course student will be able to:

1. Explain concept of infection and causation of diseases.
2. Describe body defense mechanisms and development of immunity against diseases.
3. Perform immunization effectively,
4. Describe different methods of disinfections and sterilization.
5. Describe common communicable disease and their management.
6. Explain prevention of common communicable diseases and their control.
7. Describe care of the sick in community with common ailment and refer if required.
8. Explain recognition of conditions related to different body systems.
9. Describe and demonstrate routes of administration of drugs.
10. List common drugs used for emergencies and minor ailments, their indications, dosage and actions.
11. List common drugs used for ophthalmic emergencies and minor ailments, their indications, dosage and actions.

A. Infection and Immunization

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	2	-	• Understand concept of occurrence of diseases • Describe classification of diseases.	Concept of diseases. • Concept and definition of illness • Disease causation. • Classification of diseases.	• Lecture discussion. • Explain using Charts.
2	4	2	• Understand process of infection • Describe characteristics of microbes • Narrate methods of spread of infection. • State factors affecting spread of infection.	Infection • Meaning and types of infection. • Causes of infection • Classification of characteristics of micro organisms: pathogenic and non-pathogenic • Incubation period and spread of infection transmission • Factors affecting growth and destruction of microbes.	• Lecture discussion. • Demonstration • Explain using microscope.
3	6	2	• Understand body defence mechanism • State types of immunity • Describe different types of vaccine and their preservation.	Immunity and body defense mechanisms • Body's defense mechanism • Immunity – concept • Hypersensitivity: Antigen antibody reaction. • Types of immunity.	• Lecture discussion. • Demonstration

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
				Types of vaccines	
4	6	4	- State immunization schedule - Give immunization - Organize immunization camps. - Prepare articles for immunization - Participate in special drives.	Immunization - Immunization against different infections - immunization schedule - Injection safety - Methods of administering vaccine - Sterilization of syringes and needles. - Immunization in the community - Precautions while giving vaccines - Special immunization drives and programmes. - Records and reports.	- Lecture discussion. - Demonstration - Posters on immunization schedule
5.	2	4	- Collect specimens correctly - Handle body discharges safely - Give health education for disposal of body discharges.	Collection of specimen Principles and methods of collection of specimens and handling body discharges.	- Lecture discussion. - Collection of sputum. - Collection of urine and stool.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
				- Collection of specimens of bloods, sputum, urine, stool - Safe disposal of body discharges.	- Labeling of the specimens - Visit to the laboratory.
6	3	6	- Explain difference between antisepsis, disinfection and sterilization - Describe the principles of antisepsis, disinfection and sterilization. - Perform disinfections and sterilization of various equipments.	Disinfection and sterilization - Principles and methods of antisepsis, disinfection and sterilization - Methods of disinfecting different equipments - Methods of sterilizing different equipments.	- Lecture discussion. - Demonstration - Visit sterilization department of a hospital.
7.	2	2	Explain the methods of waste disposal	Waste Disposal Waste disposals infectious and non infectious: concepts principles, and methods at different levels.	- Lecture discussion. - Demonstration.

Suggested Activities for Evaluation

- Demonstration of autoclaving and ETO sterilization
- Techniques of vaccination
- Prepare poster/chart on immunization schedule.
- Demonstrate different methods of waste disposable.

B. Communicable Diseases

Theory - 50 hrs
Demonstration - 25 hrs
Total - 750 hrs

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	7	5	- Understand epidemiological concept of occurrence of diseases. - Describe levels of prevention and general measures for control of communicable diseases. - Explain importance of Surveillance, notification, reporting	Introduction to communicable diseases - Common communicable diseases: Epidemiological concepts- incidence and prevalence, mortality and morbidity. - Levels of prevention - Control and prevention of communicable diseases General measures - Surveillance, isolation, notification, reporting	- Lecture discussion. - Calculation of mortality and morbidity for different diseases.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
2	30	5	- Describe signs and symptoms of different communicable diseases - Explain preventive measures for different communicable diseases. - Describe care and referral for different communicable diseases.	Communicable diseases - Signs, Symptoms, care and prevention of the following: - Diphtheria, pertussis, tetanus, poliomyelitis, measles and tuberculosis - Chicken pox, mumps, rubella, enteric fever, hepatitis, rabies, malaria, dengue, filarial, kala- azar trachoma, conjunctivitis, scabies, STDs and HIV/AIDS. - Encephalitis - Leptospirosis - Acute respiratory infections. - Diarrhoeal diseases - Worm infestations - Leprosy. - Role and responsibilities of ONA	- Lecture discussion. - Demonstration - Supervised Clinical Practice.
3.	8	8	- State the principles of care of infectious cases. - Enumerate Standard safety measures	Care in communicable diseases Care of patients with communicable diseases.	- Lecture discussion. - Demonstration - Prepare health education messages.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
			- Understand preventive measures - Provide health education	- Isolation methods. - Standard safety measures (Universal precautions) - Health education and messages for different communicable diseases. - Role and responsibilities of ONA	Prepare chart on Standard Safety measures
4	5	7	- Identify causes of epidemics - Define role of ONA	Epidemic Management - Definitions and causes of epidemics - Epidemic enquiry in a community and epidemic mapping - Relief work ONA	- Lecture discussion. - Community mapping - Health Education.

Suggested activities of Evaluation

- Preparation of surveillance report
- Conduct Health education

C. Community Health Problems

Theory - 35 hrs
Demonstration - 30 hrs
Total - 65 hrs

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	3	10	- Identify ophthalmic problems in the community. - Perform health assessment of individual. - Render care to the sick in the hospital. - Advise family members in care of sick.	Care of the sick in the hospital - Common health conditions in the hospital- danger signs of illnesses. - Health assessment: Taking history, Physical examination: Vital signs, Weight, Height: - Recognition of abnormalities - Identification of health problems - Management of the sick : care of the sick referral. - Health education	- Lecture discussion. - Demonstration. - Supervised clinical practice. - Health education
2.	3	8	- Check and record vital signs. - Describe stages of fever.	Fever Vital signs: Temperature, pulse, respiration, blood pressure	- Lecture discussion. - Demonstration.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			

			- List common conditions causing fever. - Provide care to patients with fever.	- Temperature maintenance and the physiology of fever. - Fever : Types and stages: - Causes of fever common conditions causing fever, malaria, typhoid acute respiratory infection (ARI) etc. - Nursing management of patient with fever - Alternate system of medicine	Supervised clinical practice
3.	4	6	- Enumerate causes, sign and symptoms respiratory problems. - Provide Care to patients with respiratory infections. - State common home remedies and their application.	Respiratory Problems - Common respiratory problems : types, classification- cold and cough, ARI, Asphyxia, tonsillitis, asthma, bronchitis pneumonia and tuberculosis - Causes, sign and symptoms, treatment of respiratory problems - Management : Role and responsibilities of ONA	- Lecture discussion. - Demonstration. - Demonstration of steam inhalation, nasal drops, oxygen inhalation - Health education

Unit	Time (Hrs.)	Expected outcomes	Contents	Teaching -
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	Th.	Demo			Learning Activities
				Patients with Respiratory problems Including Home care remedies	• Lecture discussion • Demonstration • Supervised clinical practice. • Health education
4.	2	2	• Identity cause and provide care support. • Refer when necessary.	Aches and pains • Causes and nursing management of : tooth ache, ear ache, abdominal pain, headache, joint pains. • Management as per the standing orders and protocols • Role of ONA	• Lecture discussion. • Demonstration. • Health education
5.	3	4	• Identity cause and provide care support. • Refer when necessary. • Identify cause and provide care and support • Refer when necessary	Digestive Problems • Indigestion, anorexia, vomiting, distension and Constipation. • Haemorrhoids, hernia, ulcers and intestinal obstruction • Role of ONA	• Lecture discussion. • Demonstration. • Health education

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
6.	3	4	• Identify cause and provide care support. • Refer when necessary.	Urinary Problems • Signs and symptoms of renal conditions. • Retention of urine, renal colic, edema • Role of ONA	• Lecture discussion. • Demonstration. • Health education
7.	3	4	• Identify cause and provide care support. • Refer when necessary.	Cardiovascular Problems • Signs and symptoms of cardiac conditions and blood related problems health attack, chest pain, anemia, hypertension and leukamia. • Care of a cardiac patient at home • Role of ONA	• Lecture discussion. • Demonstration. • Health education
8.	2	4	• Identify cause and provide care support. • Refer when necessary.	Diseases of the nervous system • Signs and symptoms of neurological problems- headache, backache and paralysis. • Care of a patient with stroke at home. • Care of pressure points, back care changing of positions, active and passive exercises, body support to prevent contractures. • Role of ONA	• Lecture discussion. • Demonstration. • Health education

Unit	Time (Hrs.)	Expected outcomes	Contents	Teaching -
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	Th.	Demo			Learning Activities
9.	3	4	- Identify cause and provide care and support - Refer when necessary - Give insulin injection - Counsel for prevention of complications	Metabolic diseases - Diabetes- signs and symptoms, complications diet and medications. - Skin care, foot care - Urine testing and administration of insulin injection	- Lecture discussion. - Demonstration. - Health education
10.	2	5	- Identify the conditions. - Provide care to relieve pain - Prevent complications and refer	Diseases of musculoskeletal system Signs and symptoms of sprain, tear of ligaments and arthritis.	- Lecture discussion. - Demonstration. - Case study - Health education
11	2	4	- Identify need of handicapped. - Ensure need basecare at home.	Care of handicap - Handicaps- different types - Counselling of prevention of certain handicaps - Understandings the handicapped person - Helping family to ensure need based care	- Lecture discussion. - Demonstration. - Case study.

Suggested activities for Evaluation

Demonstration of

- Urine testing for albumin and sugar.
- Urinary catheterization
- Local application of cold and hot
- Plain water enema
- Checking of B.P. and TPR
- Disease conditions.

D. Primary Medical Care

Theory - 20 hrs
Demonstration - 20 hrs
Total - 40 hrs

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	5	4	- Name different systems of medicine. - Understand abbreviations - Calculate dosages of medicines - Understand classification of drugs.	Type of drugs - Different Systems of medicine: allopathic - Classifications of drugs - Forms and characteristics of drugs - Abbreviations used in medication. - Administration of drugs: Policies and regulations, as per protocols and standing orders . - Calculation of dosage	- Lecture discussion. - Calculation of dosage and conversion - Drug study
2.	5	10	- Demonstrate Administration of drugs - Explain importance of observations and recording.	Administration of drugs - Routes of administration – Oral, parenteral (intradermal, intramuscular, subcutaneous, intravenous), rectal, local and others. - Administration of drugs: Precautions, principles - Observations and recording.	- Lecture discussion. - Demonstration - Practice session - Preparation and administration of IV fluids as per protocol - Preparation for blood transfusion as per protocol

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
3.	5	2	- Administer drugs for minor ailments - Explain the care of drugs.	Drugs used in minor ailments - Common drugs for fever, cold and cough, aches and pains etc. - Drug kit in the subcentre, content and its use. - Storage and care of drugs	- Lecture discussion - Visit subcentre - Demonstration
4.	5	4	Administer emergency drugs following precautions.	Common emergency drugs - IV fluids, antibiotics & injection - Precautions for administration - Storage and Care of emergency drugs	- Lecture discussion. - Demonstration - Drug study

Suggested activities of Evaluation

- Preparation of list of common drugs used in sub centre, their dosages and use.
- Demonstration of administration of medication by different routes
- Drug study

E. First Aid and Referral

Theory - 25 hrs
Demonstration - 35 hrs
Total - 60 hrs

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	2	7	- Understand principle of first aid care. - Use first aid kit - Demonstrate different type of bandages.	Need for First Aid - Principles of first aid. - Mobilization of resources - First aid kit & supplies - Bandages: Types, Uses - Principles and methods of bandaging	- Lecture discussion. - Demonstration - Practice session
2.	10	5	- Demonstrate first aid care for Cuts and wounds, Foreign bodies, Burns and scalds - Health education and referral	Minor injuries and ailments - Cuts and wounds: types, principles and first aid care. - Foreign bodies - Burns and scalds types, principles and first aid care - Health education and referral - Role of ONA	- Lecture discussion. - Demonstration - Practice session - Supervised clinical practice - Health education

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
3.	5	8	- Identify different bones - Describe types of fracture - Apply splints and bandages - Transfer fractured patients correctly.	Fractures - Skeletal system and different bones - Fractures: Types, Causes, signs and symptoms, first aid care - Methods of immobilization and transportation	- Lecture discussion. - Demonstration - Practice session
4.	8	15	Follow principles of first aid and provide care in different emergencies	Life Threatening Conditions - Bleeding - Drowning - Strangulation, suffocation and asphyxia - Loss of consciousness - Cardio respiratory arrest - Convulsions - Foreign bodies - Shock and allergic conditions - Poisoning, bites and stings - Stroke heat stroke - Severe burn	- Lecture discussion. - Demonstration - Nasal pack - Apply tourniquet. - BLS demonstration. - Insertion of naso gastric tube - Practice session

Suggested activities for Evaluation

- Demonstration of following:
 - Wound care
 - Splints, slings, bandages
 - Transportation of casualties
 - BLS
 - Naso gastric tube insertion
 - Care during different emergencies

CHILD HEALTH NURSING

Theory	-	110 hrs
Demonstration	-	130 hrs
Total	-	240 hrs

Learning objectives

On completion of the course the student will be able to:

1. Assess growth and development of a child at different ages.
2. Describe nutritional needs of different age groups of children.
3. Provide care to sick children during their common illness.
4. Describe school health programme
5. Describe “Rights” of children
6. Educate mothers and family member as per need of their children.

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
1.	20	20	• Assess growth and development in infants and children. • Maintain 'rod to health' chart • Explain the needs of a child • Describe the care of a normal child • State the common accidents in children and their protection	Growth & Development • Introduction to Growth & development. • Factors affecting growth and development • Growth and development in infants and children: Assessment.	• Lecture discussion. • Demonstration • Health education

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
				- Physical psychological and social development of children - Monitoring and recording of growth and development of infants and children - Care of infants and children – play hygiene, emotional needs training for bowel and urination - Accidents : causes, precautions and prevention. - Congenital anomalies	
2.	10	20	- Explain the importance of breast feeding - Educate mothers regarding breast feeding - Explain complimentary feeding - Educate for nutrition of children according to age	Nutrition of infants and children - Exclusive Breast feeding - Nutritional requirements - Complementary feeding - Problems of feeding - Problems of feeding - Breast feeding Counselling - Infant feeding and HIV - Baby friendly hospital initiative	- Lecture discussion. - Demonstration

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
3.	5	15	- Describe the rights of children. - State the steps for prevention of child labour and child abuse	Children's Rights - Convention of Rights of the Child - Prevention of child labour - Abuse and leal protection - Special care of girl child - Female infanticide	Lecture discussion.
4.	10	40	- Provide care to the sick children - Identify the signs and symptoms of common childhood disorders - Identify signs of high risk in case of ARI and Diarrhoea - Educate mother and family members regarding prevention of illness.	Care of the sick child - Common childhood disorders: - Signs, symptoms and management - Vaccine for preventable diseases - Acute Respiratory tract infections - Diarrhoea vomiting, constipation - Ear infections - Accidents and injures - Skin infections	- Lecture discussion. - Explain using charts - Demonstration - Explain using slide

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
5.	15	20	- Assess the school child. - Needs based counseling of children, teacher and parents.	Care of School Children - School health: problems and programmes - Environment of school - Assessment of general health of school children - Dental and eye problems - Nutritional deficiencies - School health education for children - Need based sharing of health information with teachers/ parents / children - Records and reports	- Lecture discussion. - Demonstration. - Health education
6.	5	5	Explain the various changes in the adolescents	Care of adolescents - Physical growth during adolescence - Emotional and behavioural changes in girls and boys - Special needs of adolescents. - Sex education for adolescents - Counselling	- Lecture discussion. - Demonstration - Explain using charts and models

Unit	Time (Hrs.)		Expected outcomes	Contents	Teaching - Learning Activities
	Th.	Demo			
7.	15	20	• Discuss the special needs of girl child • Explain the effect girl child discrimination in the family and community • Counsel mother and community on need for care of a girl child	Care of adolescent girls • Menstruation and menstrual hygiene • Special nutritional needs • Early marriage and its affects • Adolescent girls: pregnancy and abortion • Preparing for family life- pre marital counseling • Role of ANM/ female health worker	• Lecture discussion. • Explain using charts • Health education

Suggested activities for Evaluation

- Case Studies
- Breast feeding techniques
- Preparation of ORS
- Preparation of complementary feeds
- Assessment of growth and development of children
- Assessment of common childhood illnesses in infant, children and adolescent
- Poster on :
 - Growth and development
 - Prevention of common accidents in children
 - Menstrual cycle.
 - Physical changes in adolescence

OPHTHALMIC NURSING AND HEALTH PROMOTION

Hospital - 350 hrs
Total - 350 hrs

Expected Competency	Hospital Experiences
Assess person hygiene and health education	Assess personal hygiene of ophthalmic patients
Assess environmental sanitation	- Using a guideline each group assess hospital sanitation. - Prepare reports
Assess mental health of an individual	- Assesses mental health of ophthalmic patient - Health education - Prepare a report
To document different hospital visits during the programme as part of internal assessment.	

CHILD HEALTH NURSING

Hospital - 80 hrs
Total - 80 hrs

Expected Competency	Hospital Experiences
- Assess growth and development of children. - Assess health status of children	Assess growth and development of children
Care of the sick child	- Give care to children with opthalmic ailments - Identify and refer children at high risk - Demonstrate home care for a child with diarrhea and ARI
Counsel mothers about feeding of infants and young child.	- Identify and counsel mothers with problems related to breast feeding. - Demonstrate complementary food preparation and use
To document different hospital visits during the programme as part of internal assessment.	
