

ELEMENTARY PHYSICS & CHEMISTRY (THEORY)

Course Code: PMS.001T

Credit Hours: 3

Semester: I

SECTION I: ELEMENTARY PHYSICS

UNIT – I: PHYSICAL WORLD

Different System of Units (CGS and SI)

Fundamental Quantity

SI Units

UNIT - II: MATTER AND ITS NATURE BEHAVIOUR

Matter – Solid, Liquid and Gas; Characteristics

Change in state of matter: Evaporation, condensation and sublimation

UNIT –III: MOTION

Rest and Motion

Speed and Velocity

Acceleration

UNIT – IV: FORCE AND LAWS OF MOTION

Balanced and unbalanced Force

First law of Motion

Second law of motion

Third Law of Motion

UNIT –V: OPTICS

Reflection of light

Refraction of light

Image formations (By mirror and lens)

Magnification, Power of a lens

Refraction and dispersion of light through a prism.

Scattering of light – blue colour of the sky and reddish appearance of the sun at sunrise and sunset

UNIT – VI: ATOM AND NUCLEI

Composition and size of nucleus, atomic masses, isotopes, isobars; isotones.

Radioactivity – alpha, beta and gamma particles/rays and their properties

Applications of radioactivity.

Electromagnetic Waves.

SECTION II: ELEMENTARY CHEMISTRY

UNIT – I: SOME BASIC CONCEPTS OF CHEMISTRY

General Introduction: Importance and scope of chemistry.

Elements, Compounds, Mixture: Heterogeneous and homogenous

UNIT –II: STRUCTURE OF ATOM

Thompson Model & its Limitation

Rutherford's model & Its limitation

Bohr's Model & Its Limitation

Dalton's Atomic Theory

Concept of Shells and subshells & Orbital Rule

UNIT – III: MODERN PERIODIC TABLE

Significance & Classification upto 20 elements (Periodic Table)

Atomic Number, Valency & Electronic configuration, Atomic & molecular masses

Laws of Chemical Combination, atoms and molecules.

UNIT –IV: ACID, BASE AND SALT

Definitions and General Properties

Concept of pH and its importance in everyday life

UNIT – V: CHEMISTRY IN EVERYDAY LIFE

Chemicals in medicines – analgesics, tranquilizers, antiseptics, disinfectants, antimicrobials, antifertility drugs, antibiotics, antacids, antihistamines.

Chemicals in food – preservatives, artificial sweetening agents, elementary idea of antioxidants.

Cleansing agents – soaps and detergents, cleansing action.

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

HUMAN ANATOMY & PHYSIOLOGY (THEORY)

Course Code: PMS.002T

Credit Hours: 3

Semester: I

UNIT -I

Skin & sense organs- Eye, Ear, Nose, Tongue (taste buds).

UNIT - VI

Digestive system- Parts of gastrointestinal tract and associated glands. Digestion and absorption of food

UNIT -VII

Respiratory system- Parts of respiratory system. Functions of lungs, mechanism of breathing & exchange of gases in the lungs, Lung Capacity

UNIT -VIII

Urinary system- Parts of urinary system. Structure and function of kidney and urinary bladder, Mechanism of Urine Formation

UNIT - V

Circulatory system- Structure of heart, function of heart and blood vessels, Brief introduction of heart rate, Pulse rate, Blood Pressure

UNIT – X

Nervous system- Parts of Brain, Cerebrospinal Fluid (C.S.F), spinal cord. Neurons & its functions, functions of CNS, ANS,

UNIT - III

Skeletal system-Structure of Bones, Bones of cranium, face, vertebral column, Upper & lower limbs, fracture of bones, movements of joints.

Muscular System- Structure and types of muscles.

UNIT - IV

Reproductive system- Brief introduction of male & female reproductive organs and associated hormones.

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

INTRODUCTION TO OPERATION THEATRE TECHNOLOGY (THEORY)

Course Code: SUR.003T

Credit Hours: 3

Semester: I

UNIT- I

- *Environment*: Structure of the Operation Theatre, Anaesthesia Room, Sterilizer Room, Recovery Room, Store Room, Changing Room, Scrub Room.
- *Control of Infection* : Theatre Dress, Cap and Mask, Scrubbing Technique, Donning a Gown, Gloving, Theatre Cleaning

UNIT- II

- *Sterilization and Disinfection of OT & Equipments*: Definition, Methods , cleaning agents detergents.
- Various methods of chemical treatment- formalin, glutaraldehyde etc.
- Hot Air oven, Autoclaving, UV treatment.

UNIT- III

General anesthesia techniques

- Local anesthesia techniques
- Blood transfusion
- Monitoring in the operation theatre
- Preparation of Operation Site,
- *Incisions*: Incisions to Expose abdominal viscera
- *Suture Materials*: Absorbable, No absorbable, Adhesive Skin Closure, Staples, Suture & Needles

UNIT- IV

- Disposable Materials, Radiation Sources, Hazards.

INTRODUCTION TO OPERATION THEATRE TECHNOLOGY (PRACTICAL)

Course Code: SUR.003P

Credit Hours: 2

- Observation & Demonstration of Preparation of OT for surgery,
- Preparation of OT Staff,
- Methods of sterilisation in OT- Autoclaving, Fumigation
- Identification of General set of instruments.

Syllabus for: Advanced Diploma in Operation Theatre Technology (ADOTT)

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

SCHEME OF EXAMINATION - PRACTICALS

S. No.	Particulars	Marks
1	Log Book	5
2	Attendance	10
3	Internal (1 st ,2 nd Hourly & Mid-term)	10
4	Viva-voce	25
TOTAL MARKS		50

INSTRUMENTATION IN OPERATION THEATRE TECHNOLOGY (THEORY)

Course Code: SUR.004T

Credit Hours: 3

Semester: I

- The Surgical Patient
- Instruments used for Preparing the Surgical Patient
- Hemostatic instruments
- Retractors
- Dissecting Forceps
- Scissors
- Tissue- Holding Forceps
- Wound closures sutures
- Surgical needles and needle Holder
- Modern Techniques of wound closure
- Drains and their Purposes
- Thyroid Surgical Instruments
- Bowel Surgical Instruments
- Biliary Tract surgical Instruments
- Anorectal surgical Instruments
- Urological surgical Instruments
- Orthopedic Instruments
- Rubber Instruments
- Instruments used for E.N.T. surgeries
- Ophthalmological Instruments

INSTRUMENTATION IN OPERATION THEATRE TECHNOLOGY (PRACTICAL)

Course Code: SUR.004P

Credit Hours: 2

- Conducted as per theory syllabus

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
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TOTAL MARKS				50

SCHEME OF EXAMINATION - PRACTICALS

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TOTAL MARKS		50

CENTRAL STERILE SERVICES DEPARTMENT (CSSD) PROCEDURES (THEORY)

Course Code: SUR.005T

Credit Hours: 3

Semester: I

UNIT –I

Waste disposal collection of used items from user area, reception protective clothing and disinfections sage guards

UNIT-II

Use of disinfectants; sorting and classification of equipment for cleaning purposes, sharps, blunt lighted.

UNIT –III

Cleaning process - use of detergents. Cleaning instruments, cleaning jars, receivers bowls etc. trays, basins and similar hand ware utensils. Cleaning of catheters and tubing's, cleaning glass ware, cleaning syringes and needles.

UNIT-IV

Materials used for wrapping and packing /assembling pack contents. Types of packs prepared. Inclusion of trays and galli parts in packs. Method of wrapping.

UNIT –V

General observations principles of sterilization. Moist heat sterilization. Dry heat sterilization. EO gas sterilization. H₂O₂ gas plasma vapo sterilization.

CENTRAL STERILE SERVICES DEPARTMENT (CSSD) PROCEDURES (PRACTICAL)

Course Code: SUR.005P

Credit Hours: 2

- Conducted as per theory syllabus

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
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4	Viva-voce	25
TOTAL MARKS		50

ELEMENTARY BIOLOGY (THEORY)

Course Code: PMS.006T

Credit Hours: 2

Semester: I

UNIT – I: BIODIVERSITY

Need for classification, Characteristics of Life

Levels of Organization for Living things, Binomial Nomenclature

Tools for study of Taxonomy: Museums, Zoos, Herbaria, Botanical Gardens

Five Kingdom Classification - Salient features

UNIT – III : HUMAN PHYSIOLOGY

Digestion and absorption:

Alimentary canal and digestive glands; Role of digestive enzymes and gastrointestinal hormones;

Peristalsis, digestion, absorption and assimilation of proteins, carbohydrates and fats;

Calorific value of proteins, carbohydrates and fats, Egestion.

Breathing and Respiration: Respiratory organs, Mechanism of breathing and its regulation in humans–

Exchange of gases, transport of gases and regulation of respiration Body fluids and circulation.

Blood: Composition of blood, blood groups, coagulation of blood; Composition of lymph and its function;

Human circulatory system– Structure of human heart and blood vessels; Cardiac cycle, cardiac output, ECG; Double circulation

Excretory products and their elimination, Modes of excretion – Ammonotelism, ureotelism, uricotelism;

Human excretory system–structure and function; Urine formation, Osmoregulation; Regulation of kidney function– Renin-angiotensin, Atrial Natriuretic Factor, ADH and Diabetes insipidus

Locomotion and Movement: Types of movement – ciliary, flagellar, muscular;

Skeletal muscle – contractile proteins and muscle contraction; Skeletal system and its function

Neural control and coordination:

Neuron and nerves; Nervous system in humans– central nervous system, peripheral nervous system and visceral nervous system; Generation and conduction of nerve impulse; Reflex action.

Chemical coordination and regulation: Endocrine glands and hormones; Human endocrine system–

Hypothalamus, Pituitary, Pineal, Thyroid, Parathyroid, Adrenal, Pancreas, Gonads; Mechanism of hormone action (Elementary Idea); Role of hormones as messengers and regulators, Hypo- and hyperactivity and related disorders

UNIT - V: ECOLOGY & ECOSYSTEM

Organism & Environment: Habitat & Niche

Population Interaction: Mutualism, Competition, Predation & Parasitism

Population Attributes: Growth Rate, Birth Rate, Death Rate

Ecosystem: Patterns, Components; Productivity & Decomposition; Energy Flow; Pyramids of number, Biomass, energy

Nutrient Cycling: Carbon, Phosphorus, Nitrogen

Syllabus for: Advanced Diploma in Operation Theatre Technology (ADOTT)

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
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SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

INTRODUCTORY BIOLOGY (THEORY)

Course Code: PMS.007T

Credit Hours: 2

Semester: I

UNIT-I: LIVING WORLD

- Introduction to Biology
- Branches of Biology:- Anatomy, Biochemistry, Physiology, Biophysics, Biotechnology, Botany, Cell Biology, , Epidemiology, Genetics, Histology, Homology, Microbiology, Pathology, Parasitological, Pharmacology, Physiology, Virology, Zoology, Molecular Biology, Mycology, Neurobiology, Developmental Biology.
- Scope of Biology & Career Options.
- Characteristics of Living Organisms: Elementary area of Metabolism, Transfer of energy at molecular levels, Open & Closer system, Homoeostasis, Growth & Reproduction, Adaptation, Survival & Death

UNIT –II: CELL AS A BASIC UNIT OF LIFE

Cell Theory

- Difference b/w Prokaryotic cell and Eukaryotic Cell
- Brief Introduction to the cell Organelles and their functions

UNIT –IV: CELL DIVISION

Brief Introduction

- Mitosis
- Meiosis

UNIT – V: MOLECULES OF CELL

- Carbohydrates: Classification& Functions
- Amino Acids(only names):Classification & Functions
- Proteins: Classification, structure & functions
- Lipids: Classification & Functions
- Enzymes: Classification, Properties & functions
- Vitamins: Classification
- Nucleic Acid: Types

UNIT – VI: GENETICS

DNA:

DNA as a genetic material

- Chemical properties of DNA
- Nitrogenous Bases(Purines and Pyrimidines)
- Watson & Crick Model of DNA
- Chargaff Rule

RNA:

- Types and their functions
- Difference between DNA & RNA
- Brief introduction to Transduction and Translation

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

ENVIRONMENTAL STUDIES (THEORY)

Course Code: PMS.008T

Credit Hours: 2

Semester: II

UNIT-I : NATURAL RESOURCES

Renewable and non-renewable resources: Natural resources and associated problems.

- Forest resources,
- Water resources
- Mineral resources
- Food resources
- Energy resources

UNIT-II : ECOSYSTEMS

- Concept of ecosystems, Structure and function of an ecosystem.
- Producers, consumers and decomposers.
- Energy flow in the ecosystem.
- Food chains, food webs and ecological pyramids.

UNIT-III: ENVIRONMENTAL POLLUTION

- *Definition, Cause, effects and control measures of :* Air pollution, Water pollution, Soil pollution, Noise pollution, Thermal pollution
- Role of an individual in prevention of pollution.
- *Disaster management:* floods, earthquake, cyclone and landslides.

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

OPERATION THEATRE TECHNOLOGY-APPLIED (THEORY)

Course Code: SUR.009T

Credit Hours: 3

Semester: II

- Preoperative preparation of the patient
- Diagnostic procedures
- Pathological examination
- Ultrasonography
- Endoscopy
- Anaesthesia techniques
- Types of anaesthesia
- General anaesthesia
- Indication of general anaesthesia
- Endo tracheal intubation
- Maintenance
- Monitoring
- Emergency
- Care of anaesthetized patient
- Local & regional anaesthesia
- Spinal and epidural anaesthesia

OPERATION THEATRE TECHNOLOGY-APPLIED (PRACTICAL)

Course Code: SUR.009P

Credit Hours: 2

- Conducted as per theory syllabus

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

SCHEME OF EXAMINATION - PRACTICALS

S. No.	Particulars	Marks
1	Log Book	5
2	Attendance	10
3	Internal (1 st , 2 nd Hourly & Mid-term)	10
4	Viva-voce	25
TOTAL MARKS		50

OPERATION THEATRE TECHNOLOGY-CLINICAL (THEORY)

Course Code: SUR.010T

Credit Hours: 3

Semester: II

- Layout of operation theatres
- Special procedure rooms
- Principles of asepsis & sterile technologies
- Asepsis, surgical scrub, gowning & gloving
- Decontamination & disinfections
- Surgical instrumentation
- Fabrication
- Classification
- Powered surgical instruments
- Handling instruments
- Specialized surgical equipment
- Electro cautery
- Laser
- Microsurgery
- Ultra sonography
- Positioning, preparing and draping the patient

OPERATION THEATRE TECHNOLOGY-CLINICAL (PRACTICAL)

Course Code: SUR.010P

Credit Hours: 2

- Conducted as per theory syllabus

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

SCHEME OF EXAMINATION - PRACTICALS

S. No.	Particulars	Marks
1	Log Book	5
2	Attendance	10
3	Internal (1 st , 2 nd Hourly & Mid-term)	10
4	Viva-voce	25
TOTAL MARKS		50

SPECIALIZED SURGICAL TECHNIQUES & INTENSIVE CARE (THEORY)

Course Code: SUR.011T

Credit Hours: 3

Semester: II

UNIT- I

Minor surgical procedures : dressings & bandages

UNIT- II

Injectons & infusions

UNIT- III

Lumbar Puncture

UNIT- IV

Biopsies : Bone Marrow Biopsy ,Liver Biopsy & Pleural Biopsy

UNIT- V

ECG: Types of paper used for the E.C.G., Recording of E.C.G. and safety in use of equipment

Defibrillators :Uses and safety precaution during use

UNIT- VI

Cardio pulmonary Resuscitation(CPR)

Ventilation of patient in crisis:

- Mouth to Mouth
- Mouth to E.T. tube
- Ambu bag
- Different airways.
- Short terms ventilation

SPECIALIZED SURGICAL TECHNIQUES & INTENSIVE CARE (PRACTICAL)

Course Code: SUR.011P

Credit Hours: 2

- Demonstration of various equipments & techniques & procedures in I.C.U.
- Demonstration of surgical techniques as per the theory syllabus.

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

SCHEME OF EXAMINATION - PRACTICALS

S. No.	Particulars	Marks
1	Log Book	5
2	Attendance	10
3	Internal (1 st , 2 nd Hourly & Mid-term)	10
4	Viva-voce	25
TOTAL MARKS		50

COMMUNICATION SKILLS

Course Code: PMS.012T

Credit Hours: 2

Semester: II

UNIT – I

Essentials of grammar

Parts of speech:

- Articles
- Nouns
- Pronouns
- Adjective
- Verb/Adverb
- Preposition, Conjunction, Interjections

UNIT- II

Nature, scope & process of communication:

- Definition
- Process
- Various Models
- Elements
- Essential Flow of Communication
- Media of Communication
- Barriers/Factors inhibiting communication.

UNIT – III

Formal Conversations:

Meetings; Duties of participants; Interviews; Group Discussions.

UNIT- IV

- Essay & Precis Writing
- Comprehension

UNIT – V

Formal & Informal Letters.

SCHEME OF EXAMINATION - THEORY

Type of Question	Total No. of Questions	No. of Questions to be attempted	Marks (each Question)	Subtotal
SEC – A (Comprehensive)	1	1	1	10
SEC – B (Short Answer)	8	5	2	10
SEC – C (Essay writing)	3	1	10	10
SEC-D (Precis writing)	1	1	10	10
SEC-E (Letter writing)	2	1	10	10
Total Marks				50

COMPUTER BASICS (THEORY)

Course Code: PMS.013T

Credit Hours: 2

Semester: II

UNIT –I

Input and Output UNITs: Their functional characteristics, main memory, cache memory read only memory, overview of storage devices – floppy disk, hard disk, compact disk, tape.

Computer Networks and Communication: Network types, Network topologies, Network communication devices, Physical communication media, TCP/IP.

Internet and its Applications: E-mail, Telnet, FTP, WWW, Internet chatting

UNIT-II

World Wide Web (www) - History, Working, Web Browsers, Its functions, Concept of Search Engines, Searching the Web, HTTP, URLs, Web Servers, Web Protocols.

UNIT-III

MS Office: word, paint ,power point & excel; acrobat reader

UNIT-IV

Computer Viruses : Introduction, working of viruses, Categorization of computer viruses, Antivirus & its working, Virus identification techniques.

UNIT –V

Information system : definition, components & types of information system

Operational support systems & support to knowledge work

Management support systems

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

SURGICAL & PARASURGICAL EQUIPMNETS & TECHNIQUES (THEORY)

Course Code: SUR.014T

Credit Hours: 3

Semester: III

UNIT- I

- *Operation Table*: Structure, material used in fabrication and advantages of the material care, maintenance and uses, controls-Hydraulic system.

UNIT- II

- *Diathermy/ Cautery Machine*: Different type of diathermy and Cautery machines, monopolar, Bio-polar and under water working. Structural features of diathermy and cautery machines. Types of active and passive electrodes.
- *Operation Lights*: Types of Operation lights and other light sources. Structural features, care, cleaning.

UNIT- III

Scopy equipment

- Types of scope: Bronchoscope, fibroptic scope oesophageal scope, laparoscopes, cystoscopes and nephroscope etc.-their structural features, care, maintenance and uses.

UNIT- IV

Neurosurgery

- Microscope use during this surgery, proper handling & care of equipment.

SURGICAL & PARASURGICAL EQUIPMNETS & TECHNIQUES (PRACTICAL)

Course Code: SUR.014P

Credit Hours: 2

- Demonstration of various equipments and surgical techniques in OT

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

SCHEME OF EXAMINATION - PRACTICALS

S. No.	Particulars	Marks
1	Log Book	5
2	Attendance	10
3	Internal (1 st , 2 nd Hourly & Mid-term)	10
4	Viva-voce	25
TOTAL MARKS		50

ANAESTHESIA FOR SPECIALITY SURGERIES (THEORY)

Course Code: ANE.015T

Credit Hours: 3

Semester: III

UNIT-I: Neuro Anesthesia

- Glasgow coma scale
- Premedication
- Special investigation - CT, Angiography and MRI
- Air embolism

UNIT-II: Obstetric Anaesthesia

- Regional vs general anesthesia
- Induction / maintenance and recovery.
- Resuscitation of the new born, apgar score
- Spinal anaesthesia
- Epidural anaesthesia

UNIT-III: Pediatric Anaesthesia

- Premedication - modes
- Induction
- Intubation
- Reversal & extubation
- Pain management

UNIT-IV: ENT Anaesthesia

- Anaesthesia for adenotonsillectomy
- Anaesthesia for mastoidectomy
- Bronchoscopy and oesophagoscopy

UNIT-V: Cardiac Anaesthesia

- Special investigations -echo cardiography, angiography
- Premedication
- Setting up of monitoring system
- Monitoring - invasive and non – invasive
- Chest Tube Management and monitoring

ANAESTHESIA FOR SPECIALITY SURGERIES (PRACTICAL)

Course Code: ANE.015P

Credit Hours: 2

- Conducted as per theory syllabus

Syllabus for: Advanced Diploma in Operation Theatre Technology (ADOTT)

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
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SCHEME OF EXAMINATION - PRACTICALS

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4	Viva-voce	25
TOTAL MARKS		50

INTRODUCTION TO OBSTETRICS & GYNECOLOGY (THEORY)

Course Code: OBG.016T

Credit Hours: 3

Semester: III

UNIT-I: Obstetrics

Normal delivery, forceps delivery, episiotomy, Caesarian Section, Instruments of common obstetrics procedures or surgery e.g. Episiotomy, forceps delivery, Embryotomy, IUCDs, LSCS ; Laparoscopy Instruments & Procedure, Caesarian Section

- Twin pregnancy – Diagnosis & management
- Birth control methods & Procedures
- Medical termination of pregnancy.
- Instruments & Techniques of MTP

UNIT- II : Gynecology

Clinical methods in gynaecological examination

- Common diseases of vulva, vagina
- Disorders of menstruation
- Various operative positions

INTRODUCTION TO OBSTETRICS & GYNECOLOGY (PRACTICAL)

Course Code: OBG.016P

Credit Hours: 2

- Identification of various instruments & understanding the procedures.
- Demonstration of equipment & surgical techniques in Obstetrics & Gynaecology.

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
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SCHEME OF EXAMINATION - PRACTICALS

S. No.	Particulars	Marks
1	Log Book	5
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4	Viva-voce	25
TOTAL MARKS		50

BASIC INTENSIVE CARE & RESUSCITATION (THEORY)

Course Code: ICU.017T

Credit Hours: 3

Semester: III

UNIT-I: Monitoring and Diagnostic Procedures in I.C.U.

- Central Venous access
- Invasive hemodynamic monitoring
- ECG: monitoring, different types of E.C.G, recording of E.C.G. of the patient
- *Defibrillators* : Types, Principles and mechanism of the defibrillator Uses and safety precaution during use .

UNIT-II: General Care of Patient in I.C.U.

- Care of unconscious adult and pediatric patients.
- Feeding Ryle's tube insertion
- Suctioning and posturing of semiconscious and unconscious patients
- Care of mechanically ventilated patient
- Management of asepsis, acute poisoning, critically ill patient, disaster management, Nutrition, Pollution, Monitoring
- Tracheostomy, humidification
- Vascular lines - arterial, venous line
- Physiotherapy - chest physiotherapy

UNIT-III: Infectious Diseases in I.C.U.

- Antibiotics in I.C.D.
- Oxygen therapy
- Mechanical ventilation

UNIT-IV: Cardiovascular Failure

- Inotropic support
- Vasodilator drugs
- Cardio pulmonary Resuscitation (CPR) -Basic life support, Advance life support- Mouth to Mouth, Mouth to E.T. tube , Ambu bag , Different airways.

BASIC INTENSIVE CARE & RESUSCITATION (PRACTICAL)

Course Code: ICU.017P

Credit Hours: 2

- Conducted as per theory syllabus

Syllabus for: Advanced Diploma in Operation Theatre Technology (ADOTT)

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
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SCHEME OF EXAMINATION - PRACTICALS

S. No.	Particulars	Marks
1	Log Book	5
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3	Internal (1 st ,2 nd Hourly & Mid-term)	10
4	Viva-voce	25
TOTAL MARKS		50

COMMUNITY HEALTH

Course Code: PMS.018T

Credit Hours: 2

Semester: III

- General concepts of health and diseases with reference to natural history of disease with pre-pathogenic and pathogenic phase. The role of socio-economic and cultural environment in health and diseases-Epidemiology and scope.
- Public health administration-An overall view of the health Administration set up at centre and state level.
- The National Health Programmes- National Health programmes including tuberculosis, malaria, MCH and HIV/AIDS.
- Health problems in vulnerable groups-Pregnant and lactating women and infants and school going children-occupational groups, geriatrics.
- Occupational Health- Definition, scope-Occupational diseases, prevention of occupational diseases and hazards.
- Social security and other measures for the protection of occupational hazards, accidents and disease. Details of compensation acts.
- Family planning objectives of National family planning methods. A general idea of advantages and disadvantages of the method.
- Mental Health- community aspects of mental health; role of physiotherapists, therapists in mental health problems such as mental retardation etc.
- Communicable disease-An overall view of the communicable disease. Classification according to the principal mode of transmission. Role of insects and their vectors.
- International health agencies.

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50

NUTRITION

Course Code: PMS.019T

Credit Hours: 2

Semester: III

- Introduction to science of nutrition
- Food pattern and its relation to health
- Factors influencing food habits, selection and food stuffs
- Food selection, storage & preservation
- Classification of nutrients – macronutrients and micronutrients
- Proteins – types, sources requirements and deficiencies of proteins
- Carbohydrates sources, requirements & efficiency
- Fats – types, sources, requirements, deficiency and excess of fats
- Water – sources of drinking water, requirements, preservation of water
- Minerals – types, sources, requirements deficiencies of minerals
- Vitamins – types, sources, requirements deficiencies of vitamins
- Planning diets including renal diets

SCHEME OF EXAMINATION - THEORY

Types of Questions	Total No. of Questions	No. of Questions to be attempted	Marks	Subtotal
SEC -A: MCQ's	10	10	1	10
SEC -B: Short Answer Questions	7	5	3	15
SEC -C: Short Essay	7	5	5	25
TOTAL MARKS				50