## B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY from the Academic Year 2018-19

### I YEAR SYLLABUS

S.NO	NAME OF THE SUBJECTS	TOTAL HOURS ALLOTTED				
1.	ANATOMY	60 HOURS PER YEAR				
2.	PHYSIOLOGY	60 HOURS PER YEAR				
3.	BIOCHEMISTRY	45 HOURS PER YEAR				
4.	PATHOLOGY	45 HOURS PER YEAR				
5.	ENGLISH	30 HOURS PER YEAR				
6.	BASICS OF COMPUTER SCIENCE	30 HOURS PER YEAR				
7.	CLINICALS/THEATRES IN THE MORNINGS	12 HOURS PER WEEK				

### \*\*\* CLINICALS/THEATRES

- 1. I V fluids and Transfusion related matters
- 2. Dressing, sutures, bandages and plasters
- 3. Recovery room and nursing care
- 4. Pre-Operative and Post-Operative Management of Patients
- 5. Patient handling and Transportation to and from the Operation theatre
- 6. Universal precautions for HIV Positives, HBsAg Positive
- 7. Introduction to Operating room
- Ethics, Discipline, Lay out, Equipments Lights, OT table, suction, scrub station
- 8. Electrical Devices Electro cautery, Laser, Harmonic, Ligasure
- 9. Power Surgical Instruments Drills Saw, Reamer
- 10. Common General Surgical Operations and Dressings

### Paper -I : Basic Science

### **BASIC ANATOMY**

### **THEORY**

**Introduction to Anatomy** 

**Basic Anatomical terminologies** 

Osteology- Upper limb – clavicle, scapula, humerus, radius, ulna Lower limb - femur, hipbone, sacrum, tibia, fibula Vertebral column

**Thorax** – Intercostal space, pleura, bony thoracic cage, ribs sternum & thoracic vertebrae, Muscles of Thorax, Diaphragm, Lungs

Airway – Larynx, Trachea, bronchial tree

**Heart** – Surface anatomy of heart, chambers of the heart, valves of the heart, major blood vessels of heart, pericardium, coronary arteries.

**Excretory sytem** – Kidneys, ureters, bladder, urethra

Liver

**Central Nervous system** 

### **PRACTICALS**

### Mannequins to be provided for Teaching

Osteology – Bones identification (right and left side) and prominent features of clavicle, scapula, radius, ulna, humerus, femur, hip bone, sacrum, tibia, fibula. Surface Anatomy,

Radiology, X-ray Chest PA view, X-ray of limbs and X-ray abdomen: - - Names Views and identification

Specimens/Models, OSPE charts.

### **PHYSIOLOGY**

### **THEORY**

### 1) The Cell:

(I) Cell Structure and functions of the various organelles. (ii) Endocytosis and exocytosis

(iii) Neuro muscular junction

### 2) The Blood:

- (i) Composition of Blood, functions of the blood and plasma proteins:-
- Function of Hemoglobin (ii)
- Erythrocyte Sedimentation Rate. (iii)
- Detailed description about WBC-Total count (TC), Differential count (DC) and (iv) functions.
- Platelets formation and normal level and functions (v)
- Blood groups and Rh factor (vi)

### 3) Cardio-Vascular System:

- (i) Physiology of the heart
- Heart sounds (ii)
- Cardiac cycle, Cardiac output. (iii)
- Auscultatory areas. (iv)
- Arterial pressures, blood pressure (v)
- Hypertension (vi)
- Electro cardiogram (ECG) (vii)
- Cardio Pulmonary Resuscitation (viii)

### 4. Respiratory system:

- (i) Respiratory movements.
- Definitions and Normal values of Lung volumes and Lung capacities. Oxygen saturation of Blood, Pulse Oximeter Surfactants (ii)

### 5.

- Excretory system: Normal Urinary output (i)
- Micturation (ii)
- (iii) Renal function tests

### 6. Reproductive system:

- (i) Reproductive organs
- (ii) Brief account of menstrual cycle.

### 7. Central Nervous system:

- (i)Functions of CSF
- (ii)Functions of Cortex
- (iii)Steep cycle
- (iv)Reticular activating system

### 8. Endocrine system:

Functions of the pituitary, thyroid, parathyroid, adrenal and pancreatic Hormones.

### 9. Digestive system

- (i) Physiological Anatomy of the GIT.
- (ii) Food Digestion in the mouth, stomach, intestine
- (iii) Absorption of foods and gastric emptying
- (iv) Role of bile in the digestion.
- (v) Vomiting mechanism

### **PRACTICAL**

- 1) The Compound Microscope
- 2) Determination of Pulse rate Details on Pulse
- 3) Determination of Blood Groups.
- 4) Measurement of human blood pressure.
  - 5) Examination of Respiratory system to count respiratoryrate and measure inspiration and Expiration

### **BIO-CHEMISTRY**

### <u>Cellular</u> <u>Metabolism</u>

(I) Enzymes

(II) Co-enzymes

(III) Glucose

Metabolism

(IV) Urea Cycles

**(V)** Protein & lipid

Classifications and functions.

#### **Vitamins & Minerals:**

Fat soluble vitamins(A,D,E,K) – Water soluble vitamins – B-complex vitamins- principal elements(Calcium, Phosphorus, Magnesium, Sodium, Potassium, Chlorine and sulphur)-Trace elements – Basal metabolic rate(BMR) – respiratory quotient(RQ) Specific dynamic action(SDA) – Balanced diet – Nutritional deficiency like Marasmus – and Kwasoirkar

### Acids and bases:

Definition, pH, Henderson – Hasselbalch equation, Buffers, Indicators, Normality, Molarity, Molality, Blood Gas Analysis

#### **BIOCHEMISTRY SYLLABUS FOR PRACTICALS**

- 1. Benedict's test
- 2. Heat coagulation tests

### **PATHOLOGY**

1. Cellular adaptation, Cell injury & cell death. Introduction to pathology.

Overview: Cellular response to stress and noxious stimuli. Cellular adaptations of growth and differentiation. Overview of cell injury and cell death. Causes of cell injury. Mechanisms of cell injury. Reversible and irreversible cell injury. Examples of cell injury and necrosis

2. Inflammation.

General features of inflammation Acute inflammation

Chemical mediators of inflammation Chronic inflammation

3. Immunity disorders.

General features of the immune system Disorders of the immune system Hyper sensitivity reaction – I, II, III, IV

4. Infectious diseases.

General principles of microbial pathogenesis

Viral infections – HBV, HCV, HIV, CMV
Bacterial infections- Staphylococci, /streptococci, E-Coli, Salmonella, Tuberculosis.
Fungal infections
Parasitic infections
TORCH infection

### 5. Neoplasia

Definition

Nomenclature

Biology of tumor growth benign and malignant neoplasms Carcinogenic agents and their cellular interactions Clinical features of tumors

6. Environmental and nutritional disorders. Occupational Hazards

Radiationinjury Marasmus Kwashiorkar

PRACTICAL SYLLABUS:-

Specimens, Models, OSPE, Stations, CHARTS

### **ENGLISH**

Role of communication
Defining Communication
Classification of communication
Purpose of communication
Major difficulties in communication
Barriers to communication
Characteristics of successful communication – The seven Cs Communication at the work place
Human needs and communication "Mind mapping" Information communication

### Comprehension passage:

Reading purposefully Understanding what is read Drawing conclusion Finding and analysis

### **Explaining:-**

How to explain clearly Defining and giving reasons Explaining differences Explaining procedures Giving directions

### Writing business letters:-

How to construct correctly Formal language Address Salutation Body Conclusion

### **Report writing:**

Reporting an accident Reporting what happened at a session Reporting what happened at a meeting

#### **BASICS OF COMPUTER SCIENCE**

### **COURSE CONTENT:**

Introduction to computer – I/O devices – memories – RAM and ROM – Different kinds of ROM – kilobytes. MB, GB their conversions – large computer – Medium, Micro, Mini computers – Different computer languages – Number system – Binary and decimal conversions – Different operating system – MS DOS – Basic commands – MD, CD, DIR,TYPE and COPY CON commands – Networking – LAN, WAN,MAN(only basic ideas)

Typing text in MS word – Manipulating text – Formatting the text – using different font sizes, bold, italics – Bullets and numbering – Pictures, file insertion – Aligning the text and justify – choosing paper size – adjusting margins – Header and footer, inserting page No's in a document – Printing a file with options – Using spell check and grammar – Find and replace – Mail merge – inserting tables in a document.

Creating table in MS-Excel – Cell editing – Using formulas and functions – Manipulating data with excel – Using sort function to sort numbers and alphabets– Drawing graphs and charts using data in excel – Auto formatting – Inserting data from other worksheets.

Preparing new slides using MS-POWERPOINT – Inserting slides – slide transition and animation – Using templates – Different text and font sizes – slides with sounds – Inserting clip arts, pictures, tables and graphs – Presentation using wizards.

Introduction to Internet – Using search engine – Google search – Exploring the next using Internet Explorer and Navigator – Uploading and Download of files and images – E-mail ID creation – Sending messages – Attaching files in E-mail – Introduction to "C" language – Different variables, declaration, usage – writing small programs using functions and sub – functions.

### **PRACTICAL**

Typing a text and aligning the text with different formats using MS-Word Inserting a table with proper alignment and using MS-Word

Create mail merge document using MS-word to prepare greetings for 10 friends Preparing a slide show with transition, animation and sound effect using MS-Powerpoint

Customizing the slide show and inserting pictures and tables in the slides using MS-powerpoint

Creating a worksheet using MS-Excel with data and sue of functions Using MS-Excel prepare a worksheet with text, date time and data Preparing a chart and pie diagrams using MS-Excel

Using Internet for searching, uploading files, downloading files creating e-mail ID Using C language writing programs using functions

# B.Sc. Operation Theatre & Anaesthesia Technology Course IIyear syllabus

S.NO.	NAME OF THE SUBJECTS	TOTAL HOURS ALLOTTED			
1.	PHARMACOLOGY	60 HOURS PER YEAR			
2.	MICROBIOLOGY	60 HOURS PER YEAR			
3.	MEDICINE & MEDICAL ETHICS	60 HOURS PER YEAR			
4.	PRINCIPLES OF ANAESTHESIA- I	90 HOURS PER YEAR			
5.	CLINICALS/THEATRES IN THE MORNINGS	12 HOURS PER WEEK			

### SYLLABUS FOR CLINICALS/THEATRES

- 1. Sterilization assembly and packing
- 2. Principles of Sterile Techniques Surgical scrub, gowning and gloving
- 3. Surgical instrumentation, handling instruments

### Paper-1: Pharmacology and Microbiology

### **Pharmacology**

**ANTISIALAGOGUES** 

Atropine, Glycophyrrolate

#### SEDATIVES I ANXIOLYTICS

Diazepam, Midazolam, Phenergan, Lorazepam, Chloropromazine, Trichlopho

#### **NARCOTICS**

Morphine, Pethidine, Fentanyl, Pentazozine

#### **ANTIEMETICS**

Metaoclopramide, Ondanseteron, Dexamethasone

### **ANTACIDS**

Na citrate, Gelusil, Mucaine gel.

#### **H2 BLOCKERS**

Cimetidine, Ranitidine, Famotidine

#### INDUCTION AGENT

Thiopentone, Diazepam, Midazolam, Ketamine, Propofol, Etomidate.

#### MUSCLE RELAXANTS

Depolarising - Suxamethonium,

Non depolar:sing -Pancuronium, Vecuronium, Atracurium, rocuranium

#### INTRODUCTION TO GENERAL ANAESTHESIA

#### INHALATIONAL GASES

Gases - 02, N20, Air

Agents - Ether-, Halothane, Isofllurane, Saevoflurane, Desflurane

#### **REVERSAL AGENTS**

Neostigmine, Glysopyrrolate, Atropine,

Nalorphine, Naloxone, Flumazenil (Diazepam)

#### ANTISEPTICS AND DISINFECTANTS

### STERILSATION AND CLEANING OF SURGICAL EQUIPMENTS

#### LOCAL ANAESTHETICS

Xylocaine, Preparation, Local – Bupivacaine - Topical, Prilocaine-jelly, Emla - Ointment, Etidocaine. Ropivacaine

### **EMERGENCY DRUGS**

- Adrenaline: Mode or administration, dilution, dosage,
- Effects, Isoprenaline
- Atropine, bicarbonate, calcium, ephedrine, xylocard,
- Ionotropes : dopamine, dobutamine, amidaron
- Aminophylline, hydrocortisone, antihistamlnics, potassium.
- Cardlovascular drugs
- Antihypertensives
- Antiarhythmics
- Beta Blockers
- Ca Channel blockers.
- Vasodilators nitroglycerin & sodium nitroprusside
  - Respiratory system Bronchodilators, respiratory stimulants Broncholytic agents
- Renal system Diuretics, furosemide, mannitol
- Obstetrics oxoytocin, methergin
- Miscellaneous Antibiotics NSAIDS Anticoagulants and Insulin

### SYLLABUS FOR PRACITALS;-

Specimens, drugs, OSPE charts

### **Microbiology**

- Sterilization & decontamination- I o Dry
  - o Filtration
  - o General Principles Acepsis
- Wound Infection & Urinary Tract Infections
- Blood stream Infections
- Respiratory tract Infection
- S.Typhi, Salmonel1a Paratyphi 'A', Salmonella Typhimurium

- Catheter, IV associated Infections
- Hospital acquired infections & prevention of hospital acquired infections
- Hepatitis C, HBV, HIV
- \* Hyper sensitivity reaction Type I, II, III, IV

Biomedical Waste Management

### SYLLABUS FOR PRACTICALS

Biomedical waste management, colour code OSPE charts

### **Paper-2: Medicine and Medical Ethics**

### **MEDICINE**

- Disorder of haemopoiesis Anaemias iron deficience anaemia,
   Infections diseases Sepsis and septic stock, fever of unknown origin, infective endocarditis, infective of skin, muscle, soft tissue, infection control in hospital, diseases caused by bacteria, viruses, myobacterm, viruses, fungi and protozoa and helminthes, common secondary infection in HIV.
- 3. Diseases of CVS congenital RHD Rheumatic fever, CAD, Peripheral vascular
- 4. Respiratory system asthma pneumonia
  - 5. Kidney & Urinary tract acute renal failure, Glomerulonephritis, Haemodialysis, Transplant, Urinary tract infection
  - 6. Liver and biliary tract disease Viral hepatitis, alcoholism
  - 7. Endocrinology and metabolism - Diabetes mellitus, Hyper - and hypothyroidism 8. Pain Medicine

#### MEDICAL ETHICS

- 1. Medical ethics Definition Goal Scope
- 2. Code of conduct Introduction -
- 3.3. Basic principles of medical ethics Confidentiality
- 4. Malpractice and negligence Rational and irrational drug therapy
- 5. Autonomy and informed consent Right of patients
- 6. Care of the terminally ill- Euthanasia
- 8. Organ transplantation

9. Medico legal aspects of medical records – Medicolegal case and type- Records and document related to MLC - ownership of medical records - Confidentiality Privilege communication - Release of medical information - Unauthorized disclosure - rentention of medical records - other various aspects

#### SYLLABUS FOR PRACTICALS

Specimens OSPE charts

Paper:3 - PRINCIPLES OF ANAESTHESIA - I

#### 1. MEDICAL GAS SUPPLY

- Compressed gas cylinders
- Colour coding
- Cylinder valves; pin index.
- Gas piping system
- Recommendations for piping system
- Alarms & safety devices.

#### 2. ANAESTHESIA MACHINE

- Hanger and yoke system
- Cylinder pressure gauge
- Pressure regulator
- Flow meter assembly
- Vapourizers types, hazards, maintenance, filling and draining, etc.

### 3. BREATHING SYSTEM

- General considerations: humidity & heat
- Common components connectors, adaptors, reservoir bags.
- Capnography ETC o2
- Pulse oximetry
- Methods of humidification.
  - Classification of breathing system Mapleson system a b c d e f Jackson Rees system, Bain circuit
- Non rebreathing valves ambu valves
- The circle system Components Soda lime, indicators

#### 4. FACE MASKS & AIRWAY LARYNGOSCOPES

- Types, sizes
- Endotracheal tubes Types, sizes.
- Cuff system

- Fixing, removing and inflating cuff, checking tube position complications.
- \* Bousie
- \* LMA

### 5. ANAESTHESIA VENTILATOR AND WORKING PRINCIPLES.

### 6. MONITORING

- ECG
- Sp02
- Temperature
- IBP
- CVP
- PA Pressure
- LA Pressure

Bio Medical engineering of Trouble sorting Management, care of cleaning

## 7. BASIC ANAESTHETIC TECHNIQUES INTRODUCTION TO ANAESTHESIA

General

Anaesthesia \*

Regional

Anaesthesia \*

Local

Anaesthesia

- \* Intravenous Anaesthesia
- Minimum standard of anaesthesia
- Who should give anaesthesia?

### PRE-OP PREPARATION:

Pre anaesthetic assessment~ History – , past history - disease / Surgery / and personal history - Smoking / alcohol General physical assessment, systemic examination – CVS, RS, CNS

### **INVESTIGATIONS**

Routine - Urine

- Chest X ray
  - Echocardiography
  - Angiography
  - Liver function test
  - Renal function test
  - Others

Case acceptance: ASA grading - I, II, III, IV. V

### PRE - ANAESTHETIC ORDERS:

Patient - Informed consent

- Npo guidelines
- Premedication advantages, drugs used

- Haematogical - their signifi.

- Special instructions - if any

Machine - Checking the machine

02, N20, suction apparatus

Laryngoscops, et tubes, airways

- Things for IV accessibility
- Other monitoring systems

Drugs - Emergency drugs Anaesthetic drugs

#### **INTRAOPERATI**

**VE** 

### **MANAGEMENT**

- Confirm the identification of the patient
- Monitoring minimum
- Noninvasive & Invasive monitoring
- Induction drugs used
- Endotracheal intubation
- · Maintenance of anaesthesia
- Positioning of the patient
- Blood / fluid & electrolyte balance

- Reversal from anaesthesia drugs used
- Transferring the patient
- Recovery room set up and things needed

### POST OPERATIVE COMPLICATIONS & MANAGEMENT

Recovery and Delayed recovery Hypoxia and Oxygen Theraphy PONV

**8**.Basic Life Support

Cardio Pulmonary Resuscitation

### **SYLLABUS FOR PRACTICALS**

Instruments Gas cylinders

### **B.Sc.** Anaesthesia Technology Course

### III year syllabus

S.NO	NAME OF THE SUBJECTS	TOTAL HOURS ALLOTTED
1.	STERILISATION PROCEDURES	120 HOURS PER YEAR
2	PRINCIPLES OF ANAESTHESIA – II	150 HOURS PER YEAR
3.	CLINICALS/THEATRES IN THE MORNINGS	12 HOURS PER WEEK

### SYLLABUS FOR CLINICAL/THEATRE

- 1. Routine Maintenance of Equipments and Instruments
- 2. Laying out of Instrument, trolleys
- 3. Emphasis on Surgical Positions, Instruments required and the role of Theatre Assistant in various surgeries
- 4. Preparation of patient, aseptic techniques and draping
- 5. Special Instrument like Laproscope, Endoscope, Monitors, C-arm
- 6. Trouble shooting in OT
- 7. Specimen labelling and handling
- 8. Exposure to Critical Care Unit for Surgical patients

### Main Syllabus

- 1. Sterilization Procedures
- 2. Regional anaesthetic techniques
- 3. Anaesthesia for speciality Surgeries.

### **Paper -1 : Sterilization Procedures**

1. Waste disposal collection of used items from user area, reception protective clothing and disinfections sage guards, Bio-Medical wastes, Color cooling and management

- 2. use of disinfections sorting and classification of equipment for cleaning purposes, sharps, blunt lighted etc. contaminated high risk baby care delicate instruments or hot care instruments,
- 3. Cleaning process use of detergents. Mechanical cleaning apparatus, cleaning instruments,
  - Cleaning jars, receivers bowls etc. trays, basins and similar hand ware utensils. Cleaning of catheters and tubings, cleaning glass ware, cleaning syringes and needles.
  - 4. Materials used for wrapping and packing assembling pack contents. Types of packs prepared. Inclusion of trays and galliparts in packs. Method of wrapping and making use of indications to show that a pack of container has been through a sterilization process date stamping.
  - 5. General observations principles of sterilization. Moist heat V. Nervous System. Dry heat Ssterilization. EO gas sterilization. H202 gas plasma capo sterilization.

### **SYLLABUS FOR PRACTICALS**

OSPE charts, Instruments

Paper-II: Principles of Anesthesia-II

### Regional Anaesthetic techniques.

- a. Local anaesthetic technique
- b. Nerve blocks
  - c. Spinal
    Anaesthesia
    d.Epidural
    anaesthesia

### Anaesthesia for speciality Surgeries

#### **NEURO ANAESTHESIA**

- Glassgow coma scale
- Premedication
- Special investigation CT, Angiography and MRI
- Checklist
- Induction of a patient
- Reinforced Endotracheal tubes
- Postioning in neuro surgery
- •I.C.P.
- Air embolism
- Reversal of the patient
- Transferring to I.C.U. / Ward

### **OBSTETRIC ANAESTHESIA**

- Differences between a pregnant and a normal lady
- Risks for anaesthesia.
- Precautions to be taken
- Check list
- Regional vs general anaesthesia
- Induction / maintenance and recovery .
- Resuscitation of the new born, APGAR score
- Reversal and extubation
- Emergencies manual removal of placenta
- A.P .H.
- P.P.H.
- Ruptures uterus
  - Ectopic Pregnancy

### PAEDIATRIC ANAESTHESIA

- Theatre setting
- Check list
- \* Fluid Calculation and administration
- Premedication modes
- Induction
- Intubation Securing the EIT
- Reversal & extubation Problems
- Transferring / ICU management
- Pain management

#### **ENT Anaesthesia**

- Anaesthesia for adenotonsillectomy
- Anaesthesia for mastoidectomy

- Bronchoscopy and oesophagoscopy

### **CARDIAC ANAESTHESIA:**

- NYHA classification
- Arrhythmias
- Angina
- Dyspnoea
- Special investigations
- o echo cardiography
- o angiography
- Premedication
- Setting up of monitoring system
- Monitoring invasive and non invasive
- Getting ready for the case
- Induction of cardiac patient, precautions to be taken
- Cardiopulmonary bypass
- Weaning of CPB
- Transferring the patient to ICU.
- · Care to be taken
- •I.C.U management.
  - Chest tube management

### ANAESTHESIA OUTSIDE THE O.R.

- Situations
- Cath Lab
- Radiology
- E.C.T.
- Short comings.

### DAY CARE ANAESTHESIA

- Special features
- Set up
- Advantages
- Disadvantages
- Complications
- Future

#### **GERIATRIC ANAESTHESIA**

- Physiological changes
- Diseases of aging
- Nervous system
- Geriatric pharmacodynamics / pharmacokinetics
- Postoperative nervous system dysfunction.

### ANAESTHESIA FOR TRAUMA & SHOCK

- Resuscitation
- Pre-op investigation & assessment
- Criculatory management
- Management of anaesthesia
- Rapid sequence induction
- Other problems

### THORACIC ANAESTHESIA

- Pulmonary function tests o bed side o Vitallograph
- Preoperative preparation
- Premedication
- Check list
- Induction. Intubation
- Double lumen tubes
- monitoring
- Pain management
- Extubation
- ICU management

### Postoperative problems

Nausea & Vomiting Sore throat Laryngeal edema, Bronchospasm Neurological complications. Awareness Vascular complications. Trauma to teeth Headache Backache Ocular complications Auditory complications

### **MAJOR CATASTROPHES**

o Mortality
o Causes of death o
Cerebral damage o
Prevention.

### **SYLLABUS FOR PRACTICALS**

Instruments, OSPE charts

## B.Sc.DEGREE IN OPERATION THEATRE AND ANAESTHESIA TECHNOLOGY EXAMINATION PATTERN – I YEAR

### **B.Sc.** in Operation Theatre and Anaesthesia Technology

S.NO.	SUBJE CTS	THEORY		PRACTICAL		VIVA		INTERNAL ASSESSMENT	
		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1.	BASIC SCIEN CES *	100	50	100	50	50	25	50	20
2.	BASIC S OF COMP UTER SCIEN CE AND ENGLI SH **	100	50	100	50	50	25	50	25

- $\underline{\text{*-}}$  Marks in Basic sciences to be allotted as Anatomy- 30% Physiology -30% Biochemistry 20% & Pathology 20%
- $\frac{**\_}{\text{will}}$  Basics of Computer science and English will be internal paper Institution send the marks to the University.

## B.Sc. DEGREE IN OPERATION THEATRE AND ANAESTHESIA TECHNOLOGY EXAMINATION PATTERN – II YEAR

S.NO.	SUBJE CTS	THEORY		PRACTICAL		VIVA		INTERNAL ASSESSMENT	
		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1.	PHAR MACO LOGY & MICR OBIOL OGY	100	50	100	50	50	25	50	20
2.	MEDIC INE & MEDIC AL ETHIC S	100	50	100	50	50	25	50	25
3.	PRINC IPLES OF ANAES THESI A – I	100	50	100	50	50	25	50	25

### EXAMINATION PATTERN – III YEAR

B.Sc. Degree in Operation Theatre and Anesthesia Technology

S.NO.	SUBJE CTS	THEORY		PRACTICAL		VIVA		INTERNAL ASSESSMENT	
		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1.	STERI LISATI ON PROCE DURES	100	50	100	50	50	25	50	20
2.	PRINC IPLES OF ANAES THESI A - II	100	50	100	50	50	25	50	25

### **POSTINGS DURING ONE YEAR INTERNSHIP**

Sterlisation room - 3 months.
 Post -Operative room/ Recovery room - 3 months (Including Postings in Medical/Surgical Record room)

3. Surgical ICU - 3 months4. Operation Theatre including

General surgery OT — 1 month Obstetrics & Gynaecology OT — 1 month Paediatrics OT — 15 days Others — 15 days.

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