**OPERATION THEATER TECHNOLOGY**

**NAME OF COURSE : OPERATION THEATER TECHNOLOGY**

**DURATION OF COURSE: ONE & TWO YEAR COURSE ( CERTIFICATE / DIPLOMA)**

**Eligibility:** 10th Or Equivalent examination passed will be eligible for 2 Year Diploma Course Or 1 Year Certificate Course

12th Or Equivalent examination passed will be eligible for 1 Or 2 Year Diploma Course

**ONE YEAR (CERTIFICATE/ DIPLOMA) COURSE CONTENT:**

ANATOMY & PHYSIOLOGY 2. . ANESTHETIC DRUGS & EQUIPMENTS AND SPECIAL OPERATION THEATER TRAY SET- UP 3. SURGICAL PROCEDURES ( DISINFECTION ON STERLIZATION) – CARE OF PATIENT IN EMERGENCIES 4. OPERATION THEATER TECHNIQUES

1. **TWO YEAR ( DIPLOMA ) COURSE CONTENT:**

**FIRST YEAR:** 1. ANATOMY & PHYSIOLOGY 2. ANESTHETIC DRUGS & EQUIPEMTNS AND SPECIAL OPERATON THEATER TRAY SET- UP 3. SURGICAL PROCEDURES ( DISINFECTION ON STERLIZATION) – CARE OF PATIENT IN EMERGENCIES 4. OPERATION THERATER TECHNIQUES

**SECOND YEAR:** 1. CARE OF PATIENT UNDERGOING SURGERY 2. SURGICAL PROCEDUREAND MONITORING, OPERATION THEATER ETHICS & SAFETY OF OPERATION ROOM 3. INFECTION CONTROL IN OPERATION THEATER& ROLE OF THEATER ASSISTANT

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| **DIPLOMA IN OPERATION THEATER TECHNOLOGY (FIRST YEAR)** | |
| **Practical for Paper 1, II & III - Three Practical** | |
| Paper 1 | Anatomy |
| Paper 2 | Fundamental Conceits and Procedures Related to Operation Theater and techniques |
| Paper 3 | Anesthetic drugs & Equipments and Special Operation Theater Tray set up |
| **Paper 1 - ANATOMY AND PHYSIOLOGY** | |
| **Unit - 1 Introduction to anatomy of the human body** | |
| 1 | Characteristics of living matter |
| 2 | The structure of living matter |
| 3 | Tissue system & various of human body |
| 4 | Anatomy of circulatory system |
| 5 | Anatomy of respiratory system |
| 6 | Anatomy of digestive system |
| 7 | Anatomy of live billiard system & pancreas |
| 8 | Anatomy of endocrine & exocrine glands |
| 9 | Anatomy of urinary system |
| 10 | Anatomy of nervous system |
| 11 | Anatomy of special sense organs |
| 12 | Anatomy of reproductive system |
| 13 | Anatomy of lymphatic system |
| 14 | Anatomy of skeletal system |
| **Unit - II introduction of physiology of human body** | |
| 1 | Psychology of circulatory system |
| 2 | Psychology of respiration system |
| 3 | Psychology of lymphatic system |
| 4 | Psychology of digestive system |
| 5 | Psychology of liver billiard system & pancreas |
| 6 | Psychology of endocrine & exocrine glands |
| 7 | Psychology of urinary system |
| 8 | Psychology of nervous system |
| 9 | Psychology of special senses |
| 10 | Psychology of reproductive system |
| **Paper 2 - Anesthetic drugs & Equipments and special operation theatre tray set up** | |
| **Unit - I Anesthetic** | |
| 1 | General information |
| 2 | General Anesthetic, regional anesthesia, condition anesthesia spinal & epidural anesthesia |
| 3 | Methods for preparation of patients for anesthesia |
| **Unit - II** | |
| 1 | Tray setup for general surgery |
| 2 | Instruments & tray setup of face & neck surgery |
| 3 | Tray setup for heart surgery |
| 4 | Operation of the neck & throat |
| 5 | Ophthalmic surgery |
| 6 | Thoracic surgery |
| 7 | Operation as the genitor - urinary track |
| 8 | Gynecological & obstetrical operation |
| 9 | Ortho - surgical operation |
| 10 | Operation on the vascular system |
| 11 | Radium insertion |
| 12 | Breast surgical |
| 13 | Role of the theatre assistant |
| 14 | Paramedic system |
| **Unit - III Protection of patient in surgery & Role of the theatre assistant** | |
| **Unit - IV Drugs used in operation theatre & Role of the theatre assistant** | |
| **Paper 3                – Surgical Procedures (Disinfection on Sterilization) care of patient in Emergencies**  **Paper 4               – Operation Theatre Techniques** | |
| **DIPLOMA IN OPERATION THEATRE TECHNOLOGY (FINAL YEAR)** | |
| **Paper 1 - CARE OF PATIENT UNDERGOING SURGERY (PRE & INTRA OPERATIVE) CARE OF WQUIPMENT** | |
| Unit I - Care of patient undergoing surgery | |
| 1 | Psychology support of surgical patient |
| 2 | Pre & intra operative care of patient undergoing neck surgery |
| 3 | Pre & intra operative care of patient undergoing breast procedures |
| 4 | Pre & intra operative care of patient undergoing general abdominal surgery |
| 5 | Gynecological & obstetric surgery |
| 6 | Genitourinary surgery (pre & intra operative) |
| 7 | Thoracic surgery (pre & intra operative) |
| 8 | Cardiac surgery |
| 9 | Orthopedic surgery |
| 10 | Nero & plastic surgery |
| 11 | ENT |
| 12 | Ophthalmic surgery |
| 13 | Pediatric procedures |
| Unit II - Care of equipments after surgery | |
| 1 | Disinfection |
| 2 | Sending the instrument to CSSD |
| 3 | Packing of instrument |
| Unit III - Resuscitation devices - Role of the theatre assistant | |
| 1 | Disinfection and cleaning of defibrillator, heart lung machines ventilators etc |
| **Paper 2 - Surgical procedure & monitoring - operations theatre ethics/discipline, safety for Operation room personnel & microbiology** | |
| Unit I - Surgery procedures & monitoring | |
| 1 | Pre operative consideration |
| 2 | Protection of the patient in surgery |
| 3 | Preparation of surgical instrument for different surgeries |
| 4 | Role of the theatre assistant |
| Unit II - Safety for operation room personnel | |
| 1 | Fire safety |
| 2 | Body mechanic, Air conditioning system |
| 3 | Fatigue factors, safety levels of anesthetic gases |
| 4 | Radiation surgery, intra operative x-ray, radioactive implant |
| 5 | Infection control |
| 6 | Chemical hazards, hospital protective measures |
| 7 | Screening tests for O.T |
| 8 | Role of the theatre assistant in monitoring safety of O.T. |
| Unit III - Legal & ethical issues in operation theatre | |
| **Paper 3 - Infection control in operation theatre & general to instruments** | |
| Unit I - infection control | |
| 1 | Segregation of waste |
| 2 | Cooler condensing system |
| 3 | Infection control in O.T |
| 4 | Screening teat - wall SWAB, floor SWAB |
| 5 | Disposal of OT waste |
| 6 | Role of the theatre assistant |
| Unit II - General Instruments in to & role of theatre assistant | |
| 1 | Therapeutic instrument & diagnostic instrumentation |
| 2 | Electrical circuit components |
| 3 | Electrical shock |
| 4 | Protecting the patient against chock |
| 5 | Fire safety |
| 6 | Transducers amplifiers & bio potential |
| 7 | Micro processor based equipment |
| 8 | Laser & surgical devices - laser safety |
| 9 | Intra venous pumps & catheters |
| 10 | Ventilators |
| 11 | Role of the theatre assistant |