



**THE J&K STATE PARA-MEDICAL COUNCIL
GOVERNMENT MEDICAL COLLEGE JAMMU.**

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SYLLABUS

Operation Theatre and Technology

➤ **Anatomy and Physiology**

(Marks 20)

- ✓ Elementary Physics and Chemistry
- ✓ Characteristic of living matter
- ✓ The structure of living matter
- ✓ The Tissues
- ✓ Systems and various parts of human body
- ✓ Development and types of Bones
- ✓ Bones of head & trunk
- ✓ Bones of the limb
- ✓ Joints or Articulations
- ✓ Structure and action of Muscles.
- ✓ The Chief Muscles of the Body
- ✓ The Blood
- ✓ The heart and Blood Vessels
- ✓ The Circulation System
- ✓ The Lymphatic System
- ✓ The Respiratory System
- ✓ The Digestive System
- ✓ The Liver, Billiary System and Pancreas
- ✓ Nutrition and Metabolism
- ✓ Endocrine Glands and Exocrine Glands
- ✓ The Urinary System
- ✓ The Nervous System
- ✓ The Ear
- ✓ The Eye
- ✓ The Skin
- ✓ The Reproductive System etc.

Surgical Instruments and Surgical Procedures (Marks 50)

✓ **Pre – Operative Consideration**

- Psychological support of the surgical patient.

✓ **Protection of the Patient in Surgery**

- Admission Procedure
- Transfer Procedure Position
- Environmental Controls
- Electro-Surgery
- Operative Records
- Counting Procedure
- Sterilization
- Emergencies and Disasters.

✓ **Surgical Instruments**

- Instruments for General Surgery
- Operation of the face and neck
- Operations of the Nose, Throat and : Accessory Nasal Sinuses
- Ophthalmic surgery
- Sinuses, Ear & throat
 - Operations of the Chest, Operations on the Genito-Urinary Tract
 - Gynecological and Obstetric Operations
 - Orthopedic Operations
 - Neuro-surgical Operations
- Radium Insertion
 - Traumatic Surgery

✓ **Surgical Procedures**

✓ **Neck Surgery**

- Thyroidectomy
- Parathyroidectomy
- Thyroglossal Cystectomy

✓ **Preast Procedures**

- Breast Biopsy
- Mastectomy

✓ **Abdominal Extraintestinal Surgery**

- Abdominal laprotomy
- Abdominal Hernlography
- Cholecystectomy
- Drainage of Pancreatic Cyst (Pseudocyst)
- Pancreaticoduodectomy (Whipples procedure)
- Pancreatectomy
- Dranage of Abscess (es) in the region of liver
- Hepatic Resection
- Splenectomy.

➤ **Gastriubtestinal Surgery**

- Esopghgосcopy
- Gastroscopy
- Colonoscopy
- Sigmoidoscopy
- Vagotomy and Pyloroplasty
- Gastrostomy
- Gastrectomy
- Small Bowel Resection
- Cutaneous illeostomy
- Appendectomy
- Colostomy
- Closure of colostomy
- Right Hemincolectomy
- Transverse Coplectomy
- Anterlor Resection of the Sigmold Colon and Rectum
- Haemorrhoidectomy
- Pilonidal Cystectomy and Sinusectomy
- Theirsch Procedure
- Ripstein Procedure (Prosacral Rectopexy)

✓ **Gynaecologic and Obstetric Surgery**

- Dilatation of the Cervix and Curettage of the Uterus (D&C)
- Conization of the Uterine Cervix
- Therapeutic Abortion by suction Curettage
- Marsupialization of Bartholin's Duct Cyst
- Abdominal Ligabion (Different Procedures)
- Culdoscopy
- Anterior and /or Posterior Colporraphy
- Laparoscopy
- Total Abdominal Hysterectomy
- Splingo-Oophorectomy
- Tuboplasty of the Fallopian Tubes
- Pelvic Exenteration
- Caesarian Section.

✓ **Genitourinary Surgery**

- Hypospadias repair
- Epispadias repair
- Penile Implant
- Marshall-Marchetti-Krantz Procedure
- Hydrocolectomy
- Vasectomy
- Vasovasostomy
- Cutaneous Vasostomy
- Spermatolectomy
- Orchestomy
- Gystoscopy
- Cystoscopy
- Transurethral Resetion of the Prostate
- (TURP) and /or Lesions of the Bladder or Bladder Nech (TURB)
- Open Prostatectomy
- Nephrectomy
- Upper Tract Urolithotomy(Ureterolithotomy, Pheloothotomy, Nephrolithotomy)
cutaneous vvesterstomy
- Llegal conduit
- Extracproeal shock wave Lithotrpsy (ESWL)
- Ultrasonic Lithortripsy
- Electrohydraulic Lithotripsy

✓ **Thoracic Procedures**

- Bronchoscopy
- Mediastioscopy
- Segmental Resection of the Lung
- Wedge Resection of the Lung
- Pulmonary Lobectomy
- Pneumonectomy
- Decortication of the Lung
- Insertion of Transvenous Endocardial Pacemaker
- Correction of Pectus
- Excavatum
- Thymectomy

✓ **Cardiovascular Surgery**

- Carotid Endarterectomy
- Abdominal Aortic Procedures(Abdominal Aortic Aneurysmectomy, Abdominal Aortic Endarterectomy) with Aortic Graft
- Femoropopliteal Bypass
- Greater Saphenous vein Ligation and Stripping
- Portosystemic Shunt
- Arteriovenous Shunt
- Arteriovenous Fistula
- Cardiac procedures
- Bypass Surgery(Different Procedures)

✓ **Orthopaedic Surgery**

- Open reduction of a carpal Bone Fracture
- Excision of a Ganglion
- Carpal tunnel Release
- Open reduction of the Humerus
- Open reduction of the Radius and/or Ulna
- Open reduction of an Olecranon process Fracture
- Repair of recurrent Anterior Dislocation of the Shoulder
- Open reduction of Fracture of the Humeral Head (including Humeral Head Prosthesis)
- Internal Fixation of the Hip
- Femoral head Prosthetic Replacement
- Total Hip replacement
- Open reduction of the femoral Shaft
- Triple Arthrodesis of the Ankle
- Total Ankle joint Replacement
- Open reduction of ankle
- Arthrotomy of the Knee
- Excision of Popliteal(Baker's Cyst)
- Total knee replacement

- Open reduction of the Tibial shaft
- Bunionectomy
- Correction of hammer toe Deformity with interphalangeal Fusion
- Metatarsal Head Resection
- Procedure for correction of scoliosis
- Amputation of lower Extremity

✓ **Neurological Surgery**

- Craniotomy
- Cranioplasty
- Transphenoidal Hypophysectomy
- Ventricular Shunts
- Laminectomy
- Excision of a Cervical Intervertebral Disc with fusion, Anterior Approach.

✓ **Plastic Surgery**

- Cleft Lip repair
- Cleft Palate repair
- Reduction of Nasal Fracture
- Reduction of Mandibular Fracture
- Reduction of a Zygomatic Fracture
- Open reduction of an Orbital Floor Fracture
- Rhinoplasty
- Mentoplasty Augmentation
- Blepharoplasty
- Rhytidectomy
- Dermabrasion
- Otoplasty
- Repair of Syndactyly
- Digital Flexor Tendon repair
- Peripheral Nerve repair
- Palmar Fasciectomy
- Reduction Mammoplasty
- Abdominoplasty / Abdominal Liposuction
- Liposuction

✓ **Otorhinolaryngologic (ENT) Surgery**

- Myringotomy
- Mastoidectomy
- Tympanoplasty
- Stapedectomy
- Submucous Resection of the Nasal Septum (SMR) / Septoplasty

- Intranasal Antrostomy / Intranasal Fenestration of the Nasoantal Wall.
- Caldwell-Luo procedure(Radial Drainage of the antrum of the Maxillary Sinuses)
- Nasal Polypectomy
- Drainage of the Frontal Sinus
- Tonsillectomy and Adenoidectomy (T and A)
- Laryngoscopy
- Traheostomy
- Excision of the Submaxillary (Submandibular Gland)
- Parotidectomy
- Laryngectomy
- Radial Neck Dissection
- Excision of lesions of the oral cavity
- (Partial Glossectomy with Margyinal Rsection of the Mandible)

✓ **Ophthalmic Surgery**

- General Information
- Excision of a Chalazion
- Canthotomy
- Corection of Ectroplon
- Blepharoptosis repair
- Lacrimal Duct Probing
- Dacryocystothinostomy
- Correction of Strabismus
- Esyscertation of the Globe
- Orbital Exenteration
- Corneal Transplant /Ekeratoplasty
- Cataract Extraction
- Iridectomy
- Trabeculectomy
- Excision of a pterygium
- Repair of Retinal Detachment /Scieral Bucking
- Vitrectomty
- Refractive keratoplasty

✓ **Pediatric Procedures**

- Pediatric General Information
- Pediatric Tracheostomy
- Branchial sinusectomy
- Reparir of Congenital Diaphragmatic Hernia
- Omphalocele Repair
- Pediatric Umblical Herniography

- Repair of congenital Atresia of the Esophagus
- Insertion of a central Venous Catheter(Pediatric)
- Pyloromyotomy for congenital Hypertrophic Pyloric Stenosis
- Pediatric Gastrostomy
- Reduction of pediatric intussusception
- Pediatric Colostomy
- Pediatric Colorectal Resection for Aganglionic Megacolon/Hirschsprung's Disease
- Repair of Imperforate Anus

ANAESTHESIA

Anaesthesia :

(Marks 10)

- General Information
- General Anaesthesia
- Conduction
- ✓ **General Anaesthesia :**
- ✓ **Conduction Anaesthesia :**
 - Spinal
 - Epidural
 - Caudal
 - Regional
 - Local
 - Topical
- ✓ **Methods for Preparation of the Patients for Anaesthesia**
 - Methods and Procedures (during after operation)

➤ **Surgical Procedures and Monitoring:**

(Marks 40)

✓ **Safety for operation room personnel**

- In Service education
- Body mechanic
- Fatigue Factors
- Radiation Safety
- Infection control
- Chemical Hazards

✓ **Preparation of Instruments Tray**

- Major procedures tray
- Basic /Minor procedures tray
- Limited procedures tray
- Thyroid tray
- Long instruments tray
- Biliary tract procedures tray
- Choledochoscopy tray
- Basic rigid sigmoidoscopy tray
- Gastrointestinal procedures tray
- Rectal procedures tray

✓ **Gynaecologic and Obstetric Trays**

- Dilatation of the Cervix and Curettage of the Uterus (D&C) Tray
- Cervical Cone Tray
- Laparoscopy
- Abdominal Hystrectomy
- Caesarian Section tray
- Vaginal Hysterectomy tray

✓ **Genitourinary Trays :**

- Vasectomy tray
- Open Prostatectomy
- Kidney tray

✓ **Thoracic Trays :**

- Mediastinoscopy tray
- Thoractomy Tray
- Pacemaker tray
- ✓ **Cardiovascular Trays :-**
- Vascular Procedures tray
- Vascular Shunt Tray
- Cardiac procedures tray
- ✓ **Orthopaedic Trays :-**
- Basic orthopaedi procedures tray
- Minor orthopaedic procedures tray
- Bone holding instruments tray
- Hip retractor tray
- Knee Arthtotomy tray
- Knee or Ankle Anthroscopy tray

✓ **Neurologic Procedures Tray :**

- Craniotomy tray
- Laminectomy Tray
- Kerrison Rongeurs and Pituitary Coreps tray

✓ **Otorhinolaryngologic (ENT) Trays :-**

- Basic Ear procedures tray
- Nasal procedures tray
- Myringotomy tray
- Tonsillectomy and Adenoidectomy tray
- Tracheostomy tray
- Antral Puncture tray

✓ **Ophthalmic Trays :-**

- Basic Eye procedures tray
- Eyelid and Conjunctival procedures tray
- Basic Eye Muscle procedures tray
- Cataract Extraction and Lense procedures tray
- Glaucoma Procedures tray
- Basic Eye procedures Microscope tray
- Retinal procedures tray

✓ **Pediatric Tray :-**

- Pediatric major procedures tray
- Pediatric minor Procedures tray
- Pediatric Gastrointestinal Procedures trays.