

SYLLABUS FOR PhD IN MINIMAL ACCESS SURGERY (MAS):

LAPAROSCOPY

I General Principles

- Equipment Setup and Troubleshooting
- Access to Abdomen
- Abdominal Wall Lift Devices
- Generation of Working Space
- Hand-Assisted Laparoscopic Surgery
- Principles of Laparoscopic Hemostasis
- Principles of Tissue Approximation
- Principles of Specimen Removal
- Documentation

II Diagnostic Laparoscopy and Biopsy

- Emergency Laparoscopy
- Elective Diagnostic Laparoscopy

III Laparoscopic Cholecystectomy and Common Bile Duct Exploration

- Laparoscopic Cholecystectomy
- Laparoscopic Cholecystectomy: Avoiding Complications
- Laparoscopic Cholecystectomy: Cholangiography
- Laparoscopic Cholecystectomy: Ultrasound for Choledocholithiasis
- Laparoscopic Common Bile Duct Exploration

IV Hiatal Hernia and Heller Myotomy

- Laparoscopic Treatment of Gastroesophageal Reflux Disease and Hiatal Hernia
- Laparoscopic Paraesophageal Hernia Repair
- Laparoscopic Cardiomyotomy (Heller Myotomy)

V Laparoscopic Gastric Surgery

- Laparoscopic Gastrostomy
- Laparoscopic closure of perforated peptic Ulcer
- Gastric Resections

Laparoscopic Bariatric Surgery
Instrumentation, Room Setup, and Adjuncts for Laparoscopy in the Morbidly Obese
Roux-en-Y Gastric Bypass

VI Laparoscopic Procedures on the Small Intestine, Appendix, and Colon

Laparoscopy for Small Bowel Resection, Enterolysis, and Enteroenterostomy
Laparoscopic Appendectomy
Laparoscopic surgery for malignancy of colon and rectum
Laparoscopic- Assisted Proctocolectomy with Ileal-Pouch-Anal Anastomosis
Laparoscopy in Inflammatory Bowel Disease

VII Laparoscopic Approach to the Pancreas, Spleen, and Retroperitoneum

Laparoscopic Whipple's and Distal Pancreatectomy
Laparoscopic Cholecystojejunostomy Gastrojejunostomy
Laparoscopic Splenectomy
Laparoscopic Lymph Node Biopsy and Staging Laparoscopy
Laparoscopic Nephrectomy
Laparoscopic Adrenalectomy

VIII Hernia Repair

Laparoscopic Anatomy and abdominal wall Hernia Repair

PART 2: FLEXIBLE ENDOSCOPY

I General Principles

Flexible Endoscopes: Characteristics, Troubleshooting, and Equipment Care
Endoscope Handling, Monitoring

II Upper Gastrointestinal Endoscopy

Diagnostic Upper Gastrointestinal Endoscopy
Therapeutic Upper Gastrointestinal Endoscopy
Percutaneous Endoscopic Feeding Tube Placement
Complications of Upper Gastrointestinal Endoscopy

III Small Bowel Enteroscopy

Small Bowel Enteroscopy, Capsule Endoscopy

IV Endoscopic Retrograde Cholangiopancreatography

Endoscopic Retrograde Cholangiopancreatography: Procedure Special Considerations

Therapeutic Endoscopic Retrograde Cholangiopancreatography

Complications of Endoscopic Retrograde Cholangiopancreatography

V Choledochotomy

Diagnostic Choledochoscopy

Therapeutic Choledochoscopy and Its Complications

VII Colonoscopy

Diagnostic Colonoscopy

Therapeutic Colonoscopy and Its Complications

PART 3: THORACOSCOPY FOR THE GASTROINTESTINAL SURGEON

Video-Assisted Thoracic Surgery: Basic Concepts

Thoracoscopy for Staging of Malignancies

Minimally Invasive Esophagectomy

VATS Management of the Indeterminate Pulmonary Nodule