

RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

SYLLABUS OF COMPETITIVE EXAMINATION FOR THE POST OF ASSISTANT PROFESSOR (Super Speciality) SURGICAL GASTROENTEROLOGY MEDICAL EDUCATION DEPARTMENT

Basic Sciences -

Molecular biology in relation to GI tract /liver tumors; GI tumor and tumor biology; GI hormones in health and diseases.

Esophagus -

Anatomy and physiology of Esophagus; Motility disorders of esophagus; Approach to a patient with dysphagia; GERD & its management; Carcinoma Esophagus and its management; post-esophagectomy surgical complications; Management of corrosive esophageal injury and stricture.

Stomach -

Anatomy and Physiology of Stomach; Pathogenesis and surgical management of acid peptic disorder; Carcinoma stomach and its management; Gastrointestinal stromal tumors (GIST) of stomach; post-gastrectomy syndromes; Morbid obesity – management; Corrosive injury and stricture of stomach.

Small Intestine -

Anatomy and physiology of duodenum and small intestine; Small bowel obstruction – causes and management; Entero-cutaneous fistula; Crohn's disease – management; Short gut syndrome/ small intestinal transplantation; Tumors of Small Intestines with special reference to GIST, Lymphomas and carcinoid tumors; Mesenteric ischemia.

Clo-rectal -

Operative anatomy, Basic physiology of colon, rectum and anus; Pelvic floor dysfunction, rectal prolapse and fecal incontinence; Recto-vaginal and recto-urethral fistula; Inflammatory bowel disease (Crohn's and Ulcerative colitis) – Medical and Surgical management; Diverticular disease of colon; Colonic volvulus; Colonic polyps and familial polyposis syndrome; Colorectal carcinoma – management; Minimally invasive/Robotic techniques for operative management of colorectal carcinoma; Anal canal neoplasms – management.

Pancreas -

Anatomy, Embryology and Physiology of pancreas; Acute pancreatitis – pathogenesis, classification and management with reference to multidisciplinary step-up approach & surgical management; Chronic Calcific pancreatitis with special reference to surgical management; Cystic neoplasms of Pancreas; Neuroendocrine tumors of pancreas; Pancreatic and periampullary malignancy; Pancreaticoduodenectomy, distal pancreatectomy, median pancreatectomy; Pancreatic trauma and its management; Complications of pancreatic surgery; Pancreas and islet cell transplant.

Liver -

Segmental anatomy of liver; Liver function tests with reference to Non-invasive assessment of liver fibrosis/cirrhosis; Portal hypertension with reference to non cirrhotic portal fibrosis, extra hepatic portal venous obstruction and shunt surgeries; Cirrhosis of liver – complications &

management with reference to HRS, SBP, variceal bleed; Hepatic venous out flow tract obstructions; Infections of Liver – with special reference to Amoebic liver abscess, Hydatid disease; Hepatocellular carcinoma: pathogenesis & management; Liver SOL – evaluation and management; Operative techniques of vascular control and liver resection; FLR estimation and methods to increase FLR (PVE, ALPPS); Hepatobiliary trauma; Post-hepatectomy liver failure; Ablation therapies for liver tumors; Colo-rectal liver metastases and its management; Liver transplantation – indication, evaluation and management.

Biliary Tract -

Anatomy and Physiology of bile formation and secretion/cholestasis; Approach to a patient with Jaundice; Gall Stones, CBD stones and its management; Benign biliary stricture with special reference to post-cholecystectomy bile duct injury; Gall bladder cancer & management; Cholangiocarcinoma (intrahepatic, hilar and distal) – management; Sphincter of Oddi dysfunction/Post cholecystectomy syndrome; Choledochal cyst - evaluation and management.

Nutrition -

Normal nutrition requirement and assessment of nutritional status; Parenteral nutritional support in GI surgery; Various modes of enteral feeding and its complications (RT, NJ, FJ, Tube gastrostomy etc)

G I Radiology -

MDCT imaging of thorax & abdomen; M R I Scan with reference to MRCP, MRI pelvis and MRI liver; PET-CT in GI malignancies; Interventional Radiology: TIPSS/BRTO/PCD/PTBD/Coil embolization of pseudoaneurysm bleed.

Endoscopy-

Upper GI endoscopy, Colonoscopy, Capsule Endoscopy; Endoscopic Ultra Sound (EUS) Imaging: Therapeutic. FNAC/FNAB/Drainage of fluid collections; Endoscopic Retrograde Cholangio-Pancreatography (ERCP): Biliary & Pancreatic endotherapy and complications.

Miscellaneous-

Gastrointestinal Trauma (esophagus, stomach, duodenum, small bowel, rectal) and management; Approach to a patient with obscure GI bleed; Principles of minimally invasive/Robotic surgery; Splenic trauma and management; Splenectomy – indications, techniques and complications; Anesthesia in GI surgery and Liver transplant; ERAS protocol in GI surgery; Critical Care in GI surgery; Abdominal tuberculosis; Wound infection and its management; Stoma and its complications.

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Pattern of Question Papers:

- 1. Objective Type Paper**
- 2. Maximum Marks: 150**
- 3. Number of Questions: 150**
- 4. Duration of Paper : 2.30 Hours**
- 5. All Questions carry equal marks**
- 6. There will be Negative Marking**

(For every wrong answer one-third of the marks prescribed for that Particular question shall be deducted.)