

RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER
SYLLABUS FOR SCREENING TEST FOR THE POST OF
ASSISTANT PROFESSOR (Super Speciality)
GASTROENTEROLOGY
MEDICAL EDUCATION DEPARTMENT

1 Basic Sciences

- Immune system of GIT and its importance in various GI disorders.
- Molecular biology in relation to GI tract /liver with reference to Gene editing tools.
- GI tumor and tumor biology.
- GI hormones in health and diseases.
- Stem Cells and renewal.

2 Esophagus

- Motility disorders of esophagus.
- Approach to a patient with dysphagia.
- GERD & its management.
- Tumors of the esophagus with special reference to endoscopic management.
- Infectious diseases of the esophagus.
- Management of foreign bodies in esophagus.

3 Stomach

- Basic Physiology.
- Pathogenesis of acid peptic disorder.
- Helicobacter pylori infection in health & diseases.
- Modern management of acid peptic disorders and its complications.
- Tumors of stomach.

4 Small Intestine

- Intestinal electrolyte absorption and secretion.
- Normal absorption of nutrient.
- Malabsorption syndromes.
- Infective diarrhoea.
- Chronic diarrhoea – approach to diagnosis and management with especial reference to HIV.
- Short gut syndrome/ small intestinal transplantation.
- Auto immune disorders of small gut – Celiac diseases.
- Intestinal pseudo-obstruction/ bacterial overgrowth.
- Tumors of Small Intestines with special reference to GIST, Lymphomas.
- Approach to a patient with obscure GI bleed.

5 Colon

- Anatomy, Basic physiology of electrolyte and Water absorption.
- Congenital anomalies.
- Motility disorders – Constipation, pseudo-obstruction, IBS.

- Antibiotic associated diarrhoea.
- Inflammatory bowel disease – Immuno pathogenesis and management with reference to immunomodulator therapy.
- Diverticular disease of colon.
- Colonic polyps and polyposis syndrome.
- Colorectal tumor.

6 **Pancreas**

- Physiology of pancreatic secretion & Pancreatic function tests.
- Acute necrotising pancreatitis – pathogenesis and management with reference to multidisciplinary step up approach & endoscopic therapy of Walled of Necrosis (WON).
- Chronic Calcific pancreatitis with special reference to Tropical pancreatitis-pathogenesis and management.
- Pancreatic Endotherapy.
- Hereditary pancreatitis.
- Autoimmune pancreatitis.
- Cystic lesions of Pancreas.
- Neuroendocrine tumors of pancreas.
- Pancreatic malignancy.

7 **Liver**

- Segmental anatomy.
- Liver function tests with reference to Non invasive assessment of liver fibrosis/ cirrhosis.
- Portal hypertension with reference to non cirrhotic portal fibrosis and extra hepatic portal venous obstruction.
- Cirrhosis of liver – complications & management with reference to HRS, ACLF, VARICEAL BLEED.
- Chronic hepatitis B management with reference to newer drugs & immunotherapy.
- Chronic hepatitis C management with reference to eradication with Direct Acting Agent (DAA).
- Metabolic liver disease with reference of Wilson's disease.
- Drug induced liver injury.
- Alcoholic liver disease.
- NAFLD pathogenesis & management with newer drugs.
- Acute liver failure/ACLF.
- Auto immune Hepatitis.
- Hepatic venous out flow tract obstructions.
- Infections of Liver – with special reference to Amoebic Infection, Hydatid disease.
- Liver in Pregnancy.
- Liver transplantation and Bio-Artificial liver.
- Hepatocellular carcinoma: pathogenesis & management with reference to Immunotherapy.

- 8 **Biliary Tract**
- Physiology of bile formation and secretion/cholestasis .
 - Bilirubin metabolism.
 - Approach to a patient with Jaundice.
 - Gall Stones – Pathogenesis and Management with endoscopic management of Large CBD stone.
 - Biliary Stricture – approach to management of indeterminate stricture.
 - IgG 4 disease.
 - Malignant neoplasm of the biliary system : Ref to endoscopic management.
 - Sphincter of oddi dysfunction/Post cholecystectomy syndrome.
- 9 **Nutrition**
- Normal nutrition requirement.
 - Assessment of nutritional status.
 - Nutritional support in various GI disorders (Malabsorption, pancreatitis).
- 10 **G I Radiology**
- MDCT imaging of abdomen.
 - M R I Scan with reference to MRCP.
 - Interventional Radiology as applied to Gastroenterology : TIPSS/ BRTO/ ENDOVASCULAR THERAPY.
- 11 **Endoscopy**
- Endoscopic imaging of small bowel : Capsule Endoscopy, balloon enteroscopy.
 - Endoscopic Ultra Sound (EUS) Imaging: Therapeutic/ FNAC/ FNAB/ Drainage of fluid collections/ Biliary & Pancreatic endotherapy/guided vascular interventions, coil/glue embolisation of gastric varices & pseudoaneurysm.
- 12 **Miscellaneous**
- Human intestinal microbiota /Microbiome.
 - Obesity; pathogenesis & management with reference to endoscopic bariatric procedures.
 - Third space/ submucosal endoscopy.

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Pattern of Question Papers:

1. **Objective Type Paper**
2. **Maximum Marks: 180**
3. **Number of Questions: 180**
4. **Duration of Paper : Three Hours**
5. **All Questions carry equal marks**
6. **Medium of Screening Test: English**
7. **There will be Negative Marking**
(1/3 part of the mark(s) of each question will be deducted for each wrong answer)