# DETAILED SYLLABUS FOR THE POST OF ASSISTANT PROFESSOR IN MEDICAL GASTROENTEROLOGY IN (MEDICAL EDUCATION)

(Cat. Nos: 764/2024) - TOTAL: 100 MARKS

#### **SECTION I- Basic sciences** ( 5 Marks )

Biologyof the GI tract – including cellular growth and neoplasia, Mucosal immunity and inflammation, Enteric microbiota, GI hormones and neurotransmitters.

# **SECTION II-Nutrition in Gastroenterology**(5 Marks)

Principles of nutritional assessment, Management of nutrition, Obesity and its management (including Surgical and endoscopic treatment), Eating disorders and Food allergies

# **SECTION III- Common GI diseases and Biopsychosocial issues (**10 marks )

- -Symptoms and signs of common GI issues including approach to Abdominal pain , Dyspepsia ,Nausea and vomiting , diarrhoea and constipation, GI bleed, Jaundice and fecal incontinence.
- -Diseases involving multiple organs -oral and cutaneous manifestations of GI diseases, Diverticuli, Foreign Bodies and Bezoars, Eosinophilic disorders of GI tract, GI lymphomas, GIST, NET, Pregnancy related GI and Hepatic diseases, GI consequences of HIV infection, GI and hepatic manifestations of systemic diseases
- -Preparation and Complications of GI Endoscopy
- -Disorders of the gut brain axis
- -Factitious GI diseases, Malingering and Somatic symptom disorders

# **SECTION IV - Esophagus** (10 marks )

Anatomy, histology and Developmental anomalies

Neuromuscular function and Motility disorders

**GERD** 

Barretts esophagus

Esophageal disorders caused by medications, trauma and infections

Tumours of esophagus

# **SECTION V - Stomach and Duodenum** (10 marks)

Anatomy, histology and Developmental anomalies

Neuromuscular function and Motility disorders

H Pylori infection- Pathologenesis, Diagnosis and Management

Gastritis, Peptic ulcer disease

Gastric tumors and adenocarcinoma

#### **SECTION VI- Pancreas** (10 marks )

Anatomy, histology and Developmental anomalies

Acute and Chronic pancreatitis

Pancreatic Neoplasms and Cancer

Hereditary, Familial , Genetic disorders of pancreas and Pancreatic disorders of childhood

Endoscopic treatment of pancreatic diseases

# **SECTION VII - Biliary tract** (10 marks)

Anatomy, histology and Developmental anomalies

Biliary tract motor function and dysfunction

Enterohepatic secretion

Gallstone disease and management

Primary Sclerosing Cholangitis and Recurrent Pyogenic Cholangitis

Tumours of Biliary tract

Endoscopic and Radiologic treatment of biliary disease

GB polyps, adenomyomatosis ,Acalculous biliary pain and cholecystitis

#### **SECTION VIII - Liver** (15 marks)

Anatomy, histology and Developmental anomalies

Liver physiology

Liver function tests

Cirrhosis

Inherited Metabolic diseases - Wilsons, Hemochromatosis

Viral Hepatitis – including A, B, C,D ,E and non hepatotropic viruses

Infections including Liver abscesses

Vascular diseases of liver including EHPVO, Budd Chiari, PVT, SOS, HHT.

Alcoholic liver diseases

Non alcoholic fatty liver diseases

Primary biliary Cirrhosis , Autoimmune Hepatitis

Drug induced liver diseases

Portal hypertension and complications including variceal bleeding, ascites and Spontaneous Bacterial peritonitis

Hepatic encephalopathy, Hepatorenal syndrome ,Hepatopulmonary Syndrome and systemic complications of liver disease

Liver Transplantation – Indications, Evaluation and listing, surgical aspects and immunosuppression, Long term management

### **SECTION IX - small and large intestines** (15 marks)

Anatomy, histology and Developmental anomalies

Colonic motor and sensory function and dysfunction

Intestinal electrolyte absorption and secretion

Digestion and absorption of Macro and micronutrients , Maldigestion and Malabsorption

Small Bowel Bacterial Overgrowth

Short Bowel syndrome

Celiac disease

Tropical diarrhoea and malabsorption

Whipple disease

Infectious enteritis and proctocolitis , antibiotic induced diarrhoea ,Intestinal worms and protozoa

Food poisoning

IBD- Pathophysiology and management

Irritable Bowel Syndrome

Intestinal Obstruction, Pseudoobstruction and Ileus

Ileostomy, Colostomy and Pouches

Colonic polyps, Tumours and Cancers

# SECTION X - Recent advances in Gastroenterology and Hepatology (10 marks )

Recent advances in Endoscopy, Latest Gastroenterology and Hepatology guidelines, Newer imaging modalities, Genetics, Artifical Intelligence.

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.