Write short Notes on:

1. Discuss ammonia handling in health and in liver disease. What is its role in pathogenesis of hepatic encephalopathy?
2. Discuss the principle and technique of position emission tomography (PET). What is its role in gastro-intestinal malignancies?
3. Discuss the different genetic mutations described and their role in the pathogenesis of chronic pancreatitis. What are the Indian data on these mutations?
4. Discuss the role of the Hepatic Stellate Cell (HSC) in liver fibrosis.
5. Describe the structure and function of the interstitial cells of Cajal. What diseases are associated with abnormalities of ICC?
6. Discuss the different signaling pathways that regulate cellular growth.
7. Discuss the arterial supply and venous drainage of the colon, rectum and anal canal including common variations and collateral circulation.
8. Discuss the importance of glutamine in enteral and parenteral nutrition.
9. Discuss the receptors on the gastric parietal cell and their role in normal physiology.
10. Discuss the molecular pathways for colon carcinogenesis and enumerate evidence for ‘Adenoma-Carcinoma’ hypothesis in colon cancer.
Write short Notes on:

1. Discuss current guidelines for oral rehydration therapy and the role of zinc supplementation in acute diarrhea.
2. Discuss current concepts on emergence and treatment of resistance to nucleoside/nucleotide analogues in chronic hepatitis B.
3. Discuss the principles, indications, formulations and regimens for the use of pancreatic enzyme therapy in chronic pancreatitis.
4. What are the current indications and results of liver transplantation for hepatocellular cancer (HCC)?
5. What are the indications and results with TIPS (Transjugular Intrahepatic Portosystemic Shunt).
6. Discuss the various options available for diagnosis and management of major overt, obscure bleeding from the lower gastrointestinal tract.
7. What are the present recommendations for the use of antimicrobial agents in severe acute pancreatitis? Discuss their role in prophylaxis and therapy.
8. Discuss the different types of enteral feeding formulae available and their uses in clinical practice.
9. What tests are available to detect H-pylori infection? Discuss their utility.
10. What are the methods for Fecal Occult blood testing? Discuss the role of FOBT for screening of colorectal cancer.
Write short Notes on:

1. Discuss the principles, instrumentation, indications and results of therapy for photodynamic cholangiocarcinoma.
2. Discuss the pathology, clinical presentations and management option for intraductal pancreatic mucinous tumors (IPMT).
3. Discuss the role of genotyping of hepatitis B virus in the management of chronic hepatitis B infections.
4. What are the newer drugs being used for the treatment of chronic hepatitis C?
5. Discuss recent advances in ablative therapies for advanced hepatocellular cancer (HCC).
6. What are the current indications and results in small bowel transplantation?
7. Discuss the various types of bariatric surgical procedures in use and their effects on digestion and absorption.
8. What is the ‘Hygiene Hypothesis’? Discuss its role in causation of inflammatory Bowel disease and in its management.
9. Discuss various techniques for detection and staging of early gastric cancer.
10. Discuss antro-duodenal manometry in health and its clinical utility in practice.
Write short notes on:

1. Genetics of chronic pancreatitis
2. Hepatitis B virus replication cycle
3. Brain-gut axis in functional GI disorders
4. Pathophysiology of acute on chronic liver failure
5. Immunonutrition
6. H. pylori and gastric carcinogenesis
7. Pathogenesis of hepatic fibrosis
8. Cox-2 and stomach cancer
9. 18-FDG PET in GIT malignancies
10. Pathogenesis of cholesterol gall stones
Write short notes on:

1. Biological therapy for inflammatory bowel disease
2. Modalities for management of hepatocellular cancer
3. Drug targets and molecular mechanisms of drug resistance in Chronic Hepatitis B
4. Management of gastric subepithelial masses
5. Endoscopic therapy of gastroesophageal reflux disease
6. Management of obscure gastrointestinal bleeding
7. Diagnosis and treatment of gastroparesis
8. Prevention and management of gastroesophageal varices and varices bleeding in cirrhotics
9. Prognostic models for defining end stage liver disease
10. Management of chronic pancreatitis
Write short notes on:

1. Etiopathogenesis of Crohn's disease
2. Role of nutrition in acute pancreatitis
3. Oncogenes
4. Pathogenesis of alcoholic liver disease
5. Pharmacotherapy of obesity
6. Microvillus inclusion disease
7. Liver disease caused by herbal products
8. Pathophysiology of irritable bowel syndrome
9. Paraneoplastic syndromes affecting the gut
10. Role of endoscopic ultrasound in diagnosis and treatment of pancreatic disease
Write short notes on:

1. Pathophysiology and management of achalasia.
4. Acute Diverticulitis.
5. Approach to a patient with constipation.
6. Drug induced liver disease.
7. Indications of liver biopsy.
8. Pathophysiology of food allergy.
Write short notes on:

1. Pathophysiology and management of Hepatorenal Syndrome.
2. Role of endoscopic ultrasound in diagnosis and therapy of pancreatic disease.
5. Extracorporeal Liver assist devices.
7. Oral Nucleoside and Nucleotide Therapy in chronic Hepatitis-B liver disease.
8. Sedation and monitoring for gastrointestinal endoscopy.
10. Management of diarrhea in AIDS.
Write short notes on:

1. Staging systems for HCC.
2. RNA interference as therapeutic tool for Hepatitis-B.
3. Molecular targets for treating NASH.
5. Pathobiology and profile of GIST.
7. Primary Gastric Lymphoma: pathobiology and management.
8. Liver transplantation for HCC.
10. NSAID induced small bowel pathology.