

GASTROENTEROLOGY

PAPER – I

Time : 3 hours

GASTRO/D/12/10/I

Max. Marks : 100

**Attempt all questions in order.
Each question carries 10 marks.**

Write short notes on:

1. Somatostatin: structure, sources, physiological actions and pharmacological uses. 10
2. Premalignant conditions associated with gastric cancer. 10
3. Effect of liver disease on procoagulant and anticoagulant pathways. 10
4. Embryonic development of normal esophagus and developmental anomalies. 10
5. Real-time Polymerase Chain Reaction (RT-PCR) for measurement of nucleic acids: Principles and application in relation to viral hepatitis. 10
6. Hepatic circulation and blood flow: Special characteristics and determinants. 10
7. Molecular mechanism underlying gastrointestinal stromal Tumors (GIST) and their relevance to target chemotherapy. 10
8. Adverse effects of proton pump inhibitor therapy, particularly in relation to prolonged use. 10
9. Describe the life cycle of agents that causes hydatid cyst of the liver. 10
10. Pathophysiology of hepatorenal syndrome. 10

GASTROENTEROLOGY
PAPER – II

Time : 3 hours
Max. Marks : 100

GASTRO/D/12/10/II

Attempt all questions in order.
Each question carries 10 marks.

Write short notes on:

1. Role of antibiotics, anti-protozoal, anti-diarrheal drugs in the treatment of acute diarrhea in a healthy adult. 10
2. Role of Helicobacter pylori eradication in the treatment of non-ulcer dyspepsia. 10
3. Prospects of oral anti-viral therapy for hepatitis C virus infection. 10
4. Hepatopulmonary syndrome: definition, diagnostic criteria, investigations and treatment. 10
5. Recurrence of hepatitis B virus infection after liver transplantation: determinants, pathophysiology, prevention and treatment. 10
6. Surveillance for colonic cancer in patients with inflammatory bowel disease, and its applicability to Indian patients. 10
7. Barcelona Clinic Liver Cancer (BCLC) staging of hepatocellular carcinoma and treatment options in various stages, as per this staging. 10
8. Principles, examples, advantages and limitations of selective and partial surgical portosystemic shunts. 10
9. a) Model for end-stage liver disease (MELD) score versus Child-Pugh score for prediction of outcome in patients with chronic liver disease: their underlying principles, components, applicability and limitations. 7+3
b) Which of the two is better in your opinion and why?
10. Suppose you are a consultant gastroenterologist looking after an endoscopy unit that does about 20 endoscopic retrograde cholangiopancreatography (ERCP) procedures a week. Your ward staff thinks that the post-ERCP infection rate has increase over the last 2-3 months. How would you confirm and investigate this observation, and what steps would you take to interrupt this transmission? 10

GASTROENTEROLOGY

PAPER – III

Time : 3 hours
Max. Marks : 100

GASTRO/D/12/10/III

Attempt all questions in order.
Each question carries 10 marks.

Write short notes on:

1. Autoimmune pancreatitis: Pathogenesis, pathology and diagnostic criteria. 10
2. Genome-wide association studies: principles, potential and pitfalls. 10
3. Role of NOD2 / CARD15 gene mutations in the pathogenesis of Crohn's disease. 10
4. What are micro RNAs? What is their role in gastro-esophageal and liver cancers? 3+7
5. Impedance manometry: principles and applications. 10
6. Interleukin-28B gene polymorphisms and their role in natural history and treatment of hepatitis C virus infection. 10
7. Eosinophilic esophagitis: diagnosis and management. 10
8. Hepatitis E vaccines: Efficacy, safety and current status. 10
9. Role of gluten hypersensitivity in causation of irritable bowel syndrome. 10
10. Discuss the case for and against introduction of hepatitis A vaccine as part of India's national infant immunization programme. 10
