

## PROVISIONAL ANSWER KEY

Question 62/2025/OL

Paper Code:

Category 764/2024

Code:

Exam: Assistant Professor in Medical Gastroenterology

Date of Test 26-06-2025

Department Medical Education

Question1:-Choose the correct match with regard to hereditary gastrointestinal gastrointestinal cancer syndromes

- |                               |               |
|-------------------------------|---------------|
| (i) Lynch syndrome            | 1. STK11 gene |
| (ii) Cowden's disease         | 2. EPCAM gene |
| (iii) Peutz-Jegher's syndrome | 3. APC gene   |
| (iv) Gardner syndrome         | 4. PTEN gene  |

A:-i-4, ii-3, iii-1, iv-2

B:-i-2, ii-4, iii-1, iv-3

C:-i-4, ii-3, iii-2, iv-1

D:-i-4, ii-2, iii-3, iv-1

Correct Answer:- Option-B

Question2:-Gut microbiota are involved in the synthesis of the following vitamins :

- i. Folate
- ii. Vitamin K
- iii. Thiamine
- iv. Biotin

Choose the correct option

A:-Only (i, ii and iii)

B:-Only (ii, iii and iv)

C:-All of the above (i, ii, iii and iv)

D:-Only (i, ii and iv)

Correct Answer:- Option-D

Question3:-Which of the following statements regarding gut microbiota is/are true?

- i. Breast feeding has been shown to enrich vaginally acquired, lactic acid-producing bacteria in the baby's intestine
- ii. The jejunum is typically colonized only by relatively simple, rapidly growing, facultative anaerobes
- iii. The number and diversity of gut microbiota are least in the colon compared to the small intestine

A:-Only (i and ii)

B:-Only (ii and iii)

C:-All of the above (i, ii and iii)

D:-Only (i and iii)

Correct Answer:- Option-A

Question4:-Which of the following statements regarding gut mucosal immunity is/are true?

- i. Epithelial barrier function is provided by goblet cells and Paneth cells
- ii. T regulatory cells represent a critical component of the gut's anti-inflammatory repertoire
- iii. Mutations in FOXP3 gene cause IPEX syndrome

A:-only (ii and iii)

B:-all of the above (i, ii and iii)

C:-only (i and ii)

D:-only (i and iii)

Correct Answer:- Option-B

Question5:-Which of the following statements regarding gut neuropeptides is/are true?

- i. Cholecystokinin is a peptide transmitter produced primarily by enteroendocrine cells of the large intestine.
- ii. Leptin is secreted by the adipocytes.
- iii. Gastric fundus is the most abundant source of Ghrelin

A:-only (ii and iii)

B:-all of the above (i, ii and iii)

C:-only (i and ii)

D:-only (i and iii)

Correct Answer:- Option-A

Question6:-All are indicators of protein-calorie status except

A:-Albumin

B:-Retinol-binding protein

C:-Transferrin

D:-Ferritin

Correct Answer:- Option-D

Question7:-Which of the following statements regarding nutritional management of acute pancreatitis is/are true?

- i. Oral feeding shall be offered as soon as clinically tolerated and independent of serum lipase concentrations in patients with predicted mild acute pancreatitis
- ii. In patients with acute pancreatitis an elemental diet shall be used
- iii. Enteral nutrition should be started early, within 24 to 72 hour of admission, in case of intolerance to oral feeding

A:-only (i and ii)

B:-only (ii and iii)

C:-only (i and iii)

D:-all of the above (i, ii and iii)

Correct Answer:- Option-C

Question8:-All the following are gastric endoscopic bariatric interventions in the management of obesity except

A:-intra gastric balloons

B:-aspiration therapy

C:-endobarrier

D:-transpyloric shuttle

Correct Answer:- Option-C

Question9:-Which of the following statements regarding Avoidant Restrictive Food Intake Disorder (ARFID) is/are true?

- i. ARFID is an eating disorder characterized by the persistent failure to meet appropriate nutritional and/or energy needs
- ii. ARFID can be comorbid with neurodevelopmental disorders, such as intellectual disability and autism spectrum disorder
- iii. ARFID is a diagnosis that can occur only in children

A:-only (i and ii)

B:-only (ii and iii)

C:-only (i and iii)

D:-all of the above (i, ii and iii)

Correct Answer:- Option-A

Question10:-Which of the following statements regarding food protein induced enterocolitis syndrome (FPIES) is/are true?

- i. FPIES may present with either acute or chronic symptoms characterized by protracted vomiting and diarrhea
- ii. Cow's milk and soy are the most common triggers of FPIES
- iii. About one-third of infants with severe diarrhea develop acidosis and transient methemoglobinemia

A:-only (ii and iii)

B:-all of the above (i, ii and iii)

C:-only (i and iii)

D:-only (i and ii)

Correct Answer:- Option-B

Question11:-Identify the drug

1. Originally developed to treat hyperphosphatemia in CKD
2. FDA approved for treatment of IBS-Constipation
3. Sodium Hydrogen Exchanger Isoform 3(NHE 3) inhibitor

A:-TENAPANOR

B:-IBODUTANT

C:-EBASTINE

D:-ENTEROSGEL

Correct Answer:- Option-A

Question12:-Identify the wrong statement about Recurrent Aphthous Ulcers (RAU)

A:-Sodium Lauryl Sulphate in dental products may be causative

B:-Herpetiform aphthae usually exceed 6 mm and require months to heal, leaving scars

C:-Helicobacter pylori eradication may reduce recurrences

D:-COX 2 inhibitors and sertraline are known risk factors

Correct Answer:- Option-B

Question13:-"PPP syndrome" described in Pancreatic Acinar Cell Carcinoma involves all except

A:-Pancreatitis

B:-Polyserositis

C:-Panniculitis

D:-Polyarthrititis

Correct Answer:- Option-B

Question14:-'Cow boy gun belt and holster' pattern refers to erythematous pruritic plaques that are seen after use of

A:-Tyrosine kinase inhibitors

B:-Warfarin

C:-Vitamin K

D:-Heparin

Correct Answer:- Option-C

Question15:-ALVARADO Score for acute appendicitis includes all except

A:-Elevated temperature

B:-Anorexia

C:-Migration of pain

D:-High CRP

Correct Answer:- Option-D

Question16:-In a case of factitious constipation. Patient was given the message that the doctors are wise to the deception and that "if the next treatment fails to work, we are going to be forced to conclude that you are the source of your own illness". After this, the patient reported improvement of his symptoms. This is an example of :

A:-Confrontation

B:-Supportive confrontation

C:-Face saving technique

D:-Empathetic engagement

Correct Answer:- Option-C

Question17:-Identify the wrong statement about Gastric NETs (carcinoid tumors)

A:-Type 1 occur in chronic atrophic gastritis

B:-Type 2 are associated with MEN-1 syndrome

C:-Most Type 3 are already invasive at the time of diagnosis

D:-Fasting serum gastrin levels are usually high in Type 3

Correct Answer:- Option-D

Question18:-All are risk factors for Post ERCP pancreatitis except

A:-Pancreatic Sphincterotomy

B:-Pancreatic tissue sampling

C:-Older age

D:-Normal serum bilirubin

Correct Answer:- Option-C

Question19:-IPSID is associated with

A:-Mycobacterium Avium Complex

B:-Ebstein Barr Virus

C:-Campylobacter jejunii

D:-Strongyloides

Correct Answer:- Option-C

Question20:-Prophylactic antibiotics are recommended in all except

A:-PEG tube placement

B:-Transmural drainage of sterile pancreatic fluid collection

C:-EUS guided FNA of cystic lesions of upper GI tract

D:-EUS guided FNA of solid lesions of upper GI tract

Correct Answer:- Option-D

Question21:-Which of the following is not included in the VACTERL developmental

abnormality of esophagus?

- i. Vertebral
- ii. Liver
- iii. Cardiac
- iv. Renal

A:-i and iii

B:-ii and iv

C:-ii and iii

D:-i and iv

Correct Answer:- Option-B

Question22:-Schatski ring is

A:-Muscular and called B ring

B:-Mucosal and called B ring

C:-Muscular and called A ring

D:-Mucosal and called A ring

Correct Answer:- Option-B

Question23:-Timed barium swallow is

A:-Done at 1, 2, 5 minutes and measure height, width and area

B:-Done at 1, 3, 5 minutes and measure height, width and area

C:-Done at 1, 5, 15 minutes and measure height, width and volume

D:-Done at 1, 3, 15 minutes and measure height, width and volume

Correct Answer:- Option-A

Question24:-Surgical treatment of GERD includes all except

A:-Hills surgery

B:-Belsey repair

C:-Hellers

D:-Nissens

Correct Answer:- Option-C

Question25:-What is the clinical triad of Boerhaave's syndrome called

A:-Riglers triad

B:-Mackler triad

C:-Carney's Triad

D:-Borchardt's triad

Correct Answer:- Option-B

Question26:-GIST in EUS appears in which layers?

A:-Layer 1 and 3

B:-Layer 2 and 4

C:-Layer 1 and 5

D:-Layer 3 and 5

Correct Answer:- Option-B

Question27:-Allgrove's syndrome includes all except

A:-Achalasia

B:-Alacrimia

C:-Ageusia

D:-Adrenal insufficiency

Correct Answer:- Option-C

Question28:-Which ablation treatment is not used in Barrett's esophagus

A:-Cryotherapy

B:-RFA

C:-Photodynamic therapy

D:-Laser

Correct Answer:- Option-D

Question29:-Number of eosinophils needed per high power field to diagnose eosinophilic esophagitis is

A:->10/HPF

B:->15/HPF

C:->20/HPF

D:->25/HPF

Correct Answer:- Option-B

Question30:-Which foreign body should not be removed from the esophagus?

A:-Fish bone

B:-Coin

C:-Button Battery

D:-Body stuffing

Correct Answer:- Option-D

Question31:-A full-term newborn presents on the first day of life with bilious vomiting and mild abdominal distension. An abdominal radiograph reveals the classic "double bubble" sign. Which of the following findings is least likely to be associated with this clinical scenario

A:-history of polyhydramnios drug pregnancy

B:-Association with Trisomy 21

C:-Presence of a hypoechoic "donut sign" on ultrasound

D:-Abnormal pancreatic duct encircling the duodenum on

Correct Answer:- Option-C

Question32:-A 40-year-old woman with previously treated helicobacter pylori infection returns for follow-up two months after completing a standard triple therapy regimen. She is asymptomatic and has been off PPIs and antibiotics for more than three weeks. Which of the following tests is not appropriate to confirm H. pylori eradication?

- A:-Urea breath test
- B:-Stool antigen test
- C:-Endoscopic biopsy with rapid urease test
- D:-Serologic IgG antibody test

Correct Answer:- Option-D

Question33:-Which of the following is not true about gastric lipase?

- A:-It is secreted by chief cells of the oxyntic mucosa
- B:-It is optimum pH of 4.5 to 5.5
- C:-Its activity is lesser than that of pancreatic lipase
- D:-It does not require colipase

Correct Answer:- Option-C

Question34:-Regarding microscopic anatomy of duodenum, which of the followings is true?

- A:-Characteristics Brunner's gland in the epithelial layer
- B:-Presence of Paneth cells in the submucosa
- C:-Villi to crypt ratio in distal duodenum is 3:1
- D:-The villi in proximal duodenum are tall, slender and regular

Correct Answer:- Option-D

Question35:-Which of the following best describes the role of prostaglandins in the gastric mucosa?

- A:-Stimulate acid secretion
- B:-Inhibit mucus production
- C:-Promote mucosal blood flow
- D:-Increase pepsinogen activation

Correct Answer:- Option-C

Question36:-Which of the following factors accelerates gastric emptying rate?

- A:-Hypoglycemia
- B:-Increased acidity
- C:-Fatty acids in duodenum
- D:-Increased fundic accommodation

Correct Answer:- Option-A

Question37:-Which is true about multifocal atrophic gastritis?

- A:-Poor association with Helicobacter pylori infection



B:-Marked hypergastrinemia

C:-Antibodies to intrinsic factor commonly present

D:-Potentially reversible

Correct Answer:- Option-D

Question38:-Which of the following has lowest risk for nonsteroidal anti-inflammatory drug-induced gastro-duodenal ulcer?

A:-Concomitant use of an anticoagulant

B:-Concomitant use of a glucocorticoid

C:-Age > 70 years

D:-History of peptic ulcer

Correct Answer:- Option-B

Question39:-A 50-year-old woman presents with fatigue and paresthesia. She was found to have macrocytic anemia and her endoscopic examination revealed atrophic gastritis. Which of the following findings are not consistent with the most likely diagnosis?

A:-Low serum level of vitamin B12

B:-Hyposegmented Neutrophils

C:-Unconjugated hyperbilirubinemia

D:-Thromocytopenia

Correct Answer:- Option-B

Question40:-Which of the following is the main somatostatin containing cells in stomach?

A:-G cells

B:-D cells

C:-Parietal cell

D:-Mucous neck cell

Correct Answer:- Option-B

Question41:-Which was the first hormone to be discovered in the history of medicine?

A:-Peptide YY

B:-Gastrin

C:-Secretin

D:-Growth hormone

Correct Answer:- Option-C

Question42:-Which statement/statements is correct regarding pancreatic function tests?

i. Pancreatic enzyme estimation in the stool is an example direct pancreatic function tests

ii. Maldigestion do not occur until functional capacity of pancreas is reduced to 5 to

10% of

the normal capacity of pancreas

iii. Stimulation of pancreas with secretin and CCK is an example of direct pancreatic function test

iv. Measurement of stool fat - 10% of ingested fat appear in the stool of a normal person

A:-i only

B:-ii and iii

C:-iii and iv

D:-iv only

Correct Answer:- Option-B

Question43:-Which syndrome is characterized by Exocrine pancreatic insufficiency, hematologic abnormalities, skeletal defects and short stature?

A:-SAPHO syndrome

B:-Cystic fibrosis

C:-Kasabach-Merritt Syndrome

D:-Schwachman-Diamond Syndrome

Correct Answer:- Option-D

Question44:-Which of the following is true regarding gallstone pancreatitis?

A:-Patients with elevated AST/ALT should undergo ERCP

B:-Most cases are due to stones less than 5 mm in size

C:-Gallstone pancreatitis is more common in males

D:-30% individuals with gallstones develop Gallstone pancreatitis

Correct Answer:- Option-B

Question45:-Which of the following statements is correct regarding SPINK 1?

A:-It inhibits CFTR

B:-It enhances Trypsin degradation

C:-It is a susceptibility gene in the development of chronic pancreatitis

D:-It inhibits trypsin auto activation

Correct Answer:- Option-D

Question46:-Which one of the following cystic neoplasms of pancreas have least malignant potential?

A:-Mucinous cystic neoplasms

B:-IPMN

C:-Serous cystadenomas

D:-Solid pseudopapillary tumors

Correct Answer:- Option-C

Question47:-Which of the following has highest risk of developing pancreatic cancer by 70 years of age?

A:-Hereditary breast/Ovarian cancer

B:-FAMMM syndrome

C:-Peutz Jeghers syndrome

D:-HNPCC

Correct Answer:- Option-C

Question48:-45 year old male came to casualty after a road traffic accident. He had no significant symptoms initially and discharged from hospital after a period of observation. After 2 days he started to have abdominal pain associated with nausea and vomiting. CT scan of abdomen revealed pancreatic interstitial edema. Which part of pancreas is more vulnerable to injury?

A:-Uncinate process

B:-Tail of pancreas

C:-Head of pancreas

D:-Body of pancreas

Correct Answer:- Option-D

Question49:-A 63 year old man undergoes surgery (distal pancreatectomy) for IPMN localized to tail to pancreas. Histology of resected specimen reveals high grade dysplasia without invasion. Resected margins are not involved. What is the most appropriate follow up for this patient?

A:-Indefinite post operative surveillance with MRI every two years

B:-No post operative surveillance

C:-Total pancreatectomy

D:-Annual surveillance with follow up MRI for first 3 years, if no recurrence is noted, no further follow up is required

Correct Answer:- Option-A

Question50:-Which of the pancreatic cell type is responsible for bulk of pancreatic secretion?

A:-Acinar cells

B:-Stellate cells

C:-Ductal cells

D:-Beta cells

Correct Answer:- Option-C

Question51:-Which of the following regarding the embryology of the liver is true except?

A:-The liver is formed from the liver diverticulum and the septum transversum

B:-Intrahepatic bile ducts develop from primitive hepatocytes around branches of the portal vein

C:-Ductal plates can be detected by about 2 to 3 weeks of gestation

D:-Choledochal cyst is due to a defect during the embryogenesis of the liver

Correct Answer:- Option-C

Question52:-According to the modified Milwaukee classification system, type II Sphincter of Oddi dysfunction (SOD) is diagnosed in patients with

A:-Biliary-type pain alone

B:-Bile duct dilatation to a diameter greater than 7 mm

C:-Serum liver enzyme elevations (more than the upper limit of normal [ULN])

D:-None of the above

Correct Answer:- Option-D

Question53:-Which of the following is a cause for Bile acid diarrhea?

A:-Crohn's disease

B:-Diabetes mellitus

C:-Chronic use of NSAIDs

D:-All of the above

Correct Answer:- Option-D

Question54:-The following are true regarding Coffee and gallstones, except

A:-Drinking 2 to 3 cups of regular coffee a day gives protection from symptomatic gallstones

B:-Coffee offers similar benefits against gallstone disease in both males and females

C:-Drinking decaffeinated coffee is as effective as regular coffee in gallstone disease

D:-None of the above

Correct Answer:- Option-C

Question55:-The following are true regarding Primary Sclerosing Cholangitis (PSC) and Inflammatory Bowel Disease (IBD) except

A:-In patients with PSC and IBD, 80% of patients have ulcerative colitis

B:-PSC is present in about 7% of all patients with ulcerative colitis

C:-The association of PSC with IBD is stronger with more extensive colonic involvement

D:-PSC typically progresses independently of IBD

Correct Answer:- Option-B

Question56:-Risk factors for the development of Cholangiocarcinoma in patients with Primary Sclerosing Cholangitis (PSC) are

A:-Younger age

B:-Male sex

C:-Small duct PSC

D:-All of the above

Correct Answer:- Option-B

Question57:-The following staging systems are used in Perihilar Cholangiocarcinoma.

A:-Memorial Sloan Kettering Cancer Centre staging system (MSKCC)

B:-Mayo Clinic Staging System

C:-Union for International Cancer Control (UICC)

D:-All of the above

Correct Answer:- Option-D

Question58:-The following are true about Acalculous Cholecystitis

A:-Most cases occur in the setting of prolonged fasting, immobility and hemodynamic instability

B:-In younger patients, obesity and the accompanying increase in gallbladder wall fat are postulated to predispose to acalculous cholecystitis

C:-Acute Acalculous cholecystitis accounted for less than 15% of all cases of acute cholecystitis

D:-All of the above

Correct Answer:- Option-D

Question59:-The following are "Definite" risk factors for Cholangiocarcinoma, except

A:-Clonorchis sinensis infection

B:-Opisthorchis viverrini infection

C:-Hepatolithiasis

D:-Choledochal cyst

Correct Answer:- Option-A

Question60:-Regarding the natural history of gallstones and their complications, the following are true except

A:-Gallstones remain asymptomatic in more than 90% of patients

B:-Impacted cystic duct stones cause acute cholecystitis in 10% of patients

C:-Stones in the distal bile duct causing cholangitis or acute biliary pancreatitis in 5% of patients

D:-All are true

Correct Answer:- Option-A

Question61:-Which is false about hepatitis C virus infection?

A:-Chronic hepatitis C develops in 50-90 percent of infected patients

B:-B cell immune response in liver result in direct lysis of infected cells and inhibition of replication

C:-Rate of spontaneous clearance of hepatitis C virus is higher in symptomatic patients with in whom jaundice develops during acute infection

D:-Younger and female patients have the lowest rate of hepatitis C chronicity

Correct Answer:- Option-B

Question62:-Which is false regarding HBV-HDV coinfection?

A:-high risk of complications such as cirrhosis and HCC

B:-only approved therapy is PEG IF

C:-sustained response occurs in 50-60% pts after 1 year of treatment

D:-Myrcludex B is a drug which shows promise in early-phase clinical studies

Correct Answer:- Option-C

Question63:-Disease associations of Primary Biliary Cholangitis are all except

A:-Sjogrens Syndrome

B:-HCC

C:-Celiac Disease

D:-Intrahepatic Cholangiocarcinoma

Correct Answer:- Option-D

Question64:-All are true regarding ectopic varices except

A:-Ectopic varices account for 10-15% of all varix related bleeding episodes

B:-Rectal varices are dilated superior and middle hemorrhoidal veins

C:-Primary prophylaxis to prevent bleeding from ectopic varices is not recommended

D:-Ectopic varices are typically associated with portal vein obstruction

Correct Answer:- Option-A

Question65:-All the following neurotransmitter systems implicated in Hepatic encephalopathy are correctly matched with their normal actions except

A:-Glutamate - Neuro-inhibition

B:-GABA/BZ - Neuro-Inhibition

C:-Noradrenaline - Motor/cognitive

D:-Serotonin - Arousal

Correct Answer:- Option-A

Question66:-Which of the following statements is TRUE regarding the AUDIT-C screening tool for alcohol use?

A:-A score of 0 indicates high-risk alcohol consumption

B:-In women, a score  $\geq 3$  is considered a positive screen for risky drinking

C:-The maximum possible score is 10

D:-AUDIT-C is only applicable in patients diagnosed with liver disease

Correct Answer:- Option-B

Question67:-According to EASL guidelines, what is the gold standard for establishing a definitive diagnosis of hepatic cyst infection?

A:-Elevated C-reactive protein

B:-Fever >38.5° for >3 days

C:-18FDG PET-CT showing increased uptake

D:-Neutrophil debris and/or microorganisms in cyst aspirate

Correct Answer:- Option-D

Question68:-Which is false regarding Caroli's disease?

A:-Association with renal tubular ectasia

B:-Mutations in the PKHD1 gene have been identified in Caroli's disease

C:-Starry sky pattern is a very typical imaging finding in Caroli's disease

D:-100-fold increased cholangiocarcinoma risk

Correct Answer:- Option-C

Question69:-A 50-year-old lady diagnosed with chronic idiopathic constipation fails to respond to increased fiber supplements. It is decided to add another agent. Which of the following acts on the intestinal chloride channels to relieve constipation?

A:-Prucalopride

B:-Polyethylene glycol

C:-Lubiprostone

D:-Linaclotide

Correct Answer:- Option-C

Question70:-The unified definition of ACLF was proposed in which consensus

A:-Tokyo consensus

B:-Kyoto consensus

C:-EASL-CLIF consensus

D:-NACSELD consensus

Correct Answer:- Option-B

Question71:-Upper GI endoscopy in an elderly man evaluated for epigastric pain and early satiety reveals a submucosal mass in the gastric antrum. EUS shows a 3 ×2 cm hypoechoic mass masscontiguous with the fourth layer (muscularis propria). On the basis of the endosonographic appearance, which tumor is most likely?

A:-Carcinoid tumor

B:-Lipoma

C:-Pancreatic test

D:-GIST

Correct Answer:- Option-D

Question72:-All are immune checkpoint inhibitors used in metastatic colorectal carcinoma except

A:-Pembrolizumab

B:-Dostarlimab

C:-Nivolumab

D:-Panitumumab

Correct Answer:- Option-D

Question73:-All are true about Solid pseudopapillary tumours of pancreas except

A:-They account for less than 10% of the pancreatic cystic tumours

B:-Women are more frequently affected than men

C:-Common mutated genes in SPT are K-ras and TP53

D:-60% of SPTs are found in the body and tail of pancreas

Correct Answer:- Option-C

Question74:-Definite risk factors for Gastric adenocarcinoma are all except

A:-Hp infection

B:-Menetriers's disease

C:-Intestinal metaplasia

D:-PeutzJeghers syndrome

Correct Answer:- Option-B

Question75:-The mechanisms of action of advanced therapies for Inflammatory bowel disease are correctly matched below except

A:-Anti-integrin agent - Natalizumab

B:-IL23p19 antagonists - Risankizumab

C:-IL12/23p40 antagonist-Vendolizumab

D:-Sphingosine 1-phosphate receptor (S1PR) modulators - Ozanimod

Correct Answer:- Option-C

Question76:-Which of the following statements regarding small intestinal villi are correct?

- i. They are absent in the duodenum and progressively increase in height towards the ileum
- ii. They are primarily responsible for increasing the surface area for absorption
- iii. Crypts of Lieberkühn are located at their base
- iv. Enteroendocrine cells are predominantly found within the villous core

A:-only i and ii

B:-all of the above i, ii, iii and iv

C:-only i, ii and iii

D:-only ii and iii

Correct Answer:- Option-D

Question77:-A 45-year-old male presents with chronic diarrhea, abdominal pain and significant weight loss. Endoscopic biopsies reveal flattened villi, crypt hyperplasia and increased intraepithelial lymphocytes. Which of the following statements are true regarding his likely diagnosis?

- i. The condition is associated with an increased risk of T-cell lymphoma.
- ii. Serological markers like anti-tissue transglutaminase (tTG) IgA antibodies are



typically

elevated

iii. A gluten-free diet is the cornerstone of treatment

iv. Patients often present with isolated iron deficiency anemia without significant gastrointestinal symptoms

A:-All of the above (i, ii, iii and iv)

B:-Only (i, ii and iii)

C:-Only (i and iv)

D:-Only (ii, iii and iv)

Correct Answer:- Option-A

Question78:-A patient with severe Crohn's disease undergoes an ileocolic resection, leaving only 75 cm of jejunum and a defunctionalized colon. Which of the following are potential long-term complications or management considerations for this patient?

i. Increased risk of kidney stones due to hyperoxaluria

ii. Mandatory parenteral nutrition for long-term survival

iii. Reduced bile acid reabsorption leading to steatorrhea

iv. Increased incidence of D-lactic acidosis if significant carbohydrate malabsorption occurs

A:-only (i, ii and iii)

B:-Only (i, iii and iv)

C:-Only (ii and iv)

D:-All of the above (i, ii, iii and iv)

Correct Answer:- Option-C

Question79:-A 60-year-old female presents with recurrent episodes of bloating, abdominal discomfort and alternating diarrhea and constipation. Her symptoms improve temporarily with antibiotic courses. Which of the following investigations would be most helpful in confirming the suspected diagnosis?

i. Colonoscopy with random biopsies

ii. Hydrogen breath test after lactulose ingestion

iii. Stool ova and parasite examination

iv. Abdominal CT scan with contrast

A:-Only (i)

B:-Only (ii)

C:-Only (iii)

D:-Only (iv)

Correct Answer:- Option-B

Question80:-Regarding the pathophysiology of Inflammatory Bowel Disease (IBD), which of the following statements are correct?

i. Genetic susceptibility plays a minor role compared to environmental factors.

ii. An exaggerated immune response to commensal gut microbiota is a key feature.

iii. NOD2/CARD15 gene mutations are exclusively associated with ulcerative colitis

iv. Defects in epithelial barrier function contribute to chronic inflammation

A:-Only i and iii

B:-Only ii and iv

C:-Only ii, iii and iv

D:-All of the above (i, ii, iii and iv)

Correct Answer:- Option-B

Question81:-A 35-year-old male with a history of recurrent abdominal pain and altered bowel habits, but no alarm features, is diagnosed with Irritable Bowel Syndrome (IBS). Which of the following management strategies are appropriate for this patient?

- i. Prescription of corticosteroids for symptom relief
- ii. Dietary modification, including a low FODMAP diet trial
- iii. Antispasmodics for acute pain episodes
- iv. Regular colonoscopy for surveillance of malignancy

A:-Only i and ii

B:-Only ii and iii

C:-Only i, ii and iii

D:-All of the above i, ii, iii and iv

Correct Answer:- Option-B

Question82:-Which of the following describe mechanism of water and electrolyte absorption in the large intestine in normal cases?

- i. Active transport of sodium via epithelial sodium channels (ENaC)
- ii. Passive diffusion of water driven by osmotic gradients
- iii. Chloride secretion via CFTR channels
- iv. Short-chain fatty acid absorption contributing to water absorption

A:-only i and ii

B:-only ii, iii and iv

C:-only i, ii and iv

D:-all of the above i, ii, iii and iv

Correct Answer:- Option-C

Question83:-A patient develops severe pseudomembranous colitis following antibiotic use. Which of the following statements are accurate regarding this condition?

- i. *Clostridioides difficile* toxin A and B are the primary virulence factors
- ii. Oral Metronidazole is generally preferred over Vancomycin for severe disease
- iii. Fecal microbiota transplantaion (FMT) is a recognized treatment for recurrent infections
- iv. Colonoscopy with characteristic pseudomembranes is diagnostic but not always necessary

A:-Only i, ii and iii

B:-Only ii, iii and iv

C:-All of the above i, ii, iii and iv

D:-Only i, iii and iv

Correct Answer:- Option-D

Question84:-In the context of intestinal obstruction, which of the following are true?

- i. A "transition zone" on imaging is pathognomonic for paralytic ileus
- ii. Distal obstructions are more likely to cause significant fluid and electrolyte imbalances than proximal obstructions.
- iii. Strangulation is a surgical emergency due to the risk of bowel ischemia and perforation.
- iv. Adhesions from previous surgery are the most common cause of small bowel obstruction

A:-Only i and ii

B:-Only iii and iv

C:-Only i, iii and iv

D:-All of the above i, ii, iii and iv

Correct Answer:- Option-B

Question85:-Regarding colonic polyps and their malignant potential, which of the following statements are correct?

- i. Hyperplastic polyps have no malignant potential and do not require any surveillance
- ii. Villous adenomas carry a higher risk of malignant transformation than tubular adenomas
- iii. Sessile serrated adenomas are characterized by a "sawtooth" architecture and are often difficult to detect endoscopically
- iv. Familial adenomatous polyposis (FAP) is an autosomal dominant disorder characterized by hundreds to thousands of adenomatous polyps and an almost 100% risk of colorectal cancer if untreated

A:-Only i and ii and iii

B:-Only ii, iii and iv

C:-Only i and iv

D:-All of the above i, ii, iii and iv

Correct Answer:- Option-B

Question86:-A 50-year-old male presents with a 6-month history of watery diarrhea, abdominal pain, and weight loss. He has also developed arthralgia, lymphadenopathy and significant neurological symptoms including cognitive decline. Small bowel biopsy reveals periodic acid-Schiff (PAS)-positive macrophages in the lamina propria. Which of the following therapeutic approaches would be appropriate for this patient?

- i. Long-term broad-spectrum antibiotics, typically including trimethoprim-sulfamethoxazole
- ii. Immunosuppressive therapy with corticosteroids
- iii. Surgical resection of affected bowel segments
- iv. A gluten-free diet

A:-only i

B:-only ii and iii

C:-only i and iv

D:-all of the above i, ii, iii and iv

Correct Answer:- Option-A

Question87:-Which of the following statements about the digestion and absorption of macronutrients are accurate?

- i. Pancreatic lipase is primarily responsible for the hydrolysis of triglycerids into monoglycerides and free fatty acids
- ii. Glucose and galactose are absorbed into enterocytes via SGLT1, while fructose is absorbed via GLUT5.
- iii. Protein digestion begins in the small intestine wth the action of pepsin
- iv. Vitamin B12 absorption requires intrinsic factor, which is secreted by gastric parietal cells and occurs predominantly in the duodenum

A:-only i and ii

B:-only i, ii and iii

C:-only ii, iii and iv

D:-All of the above i, ii, iii and iv

Correct Answer:- Option-A

Question88:-A patient with a chronic history of constipation and abdominal distension undergoes a motility study that reveals delayed colonic transit. Which of the following statements are relevant to the understanding and management of colonic motor dysfunction?

- i. Biofeedback therapy can be effective for managing pelvic floor dyssynergia in some patients
- ii. Opioid-induced constipation primarily results from increased colonic motility.
- iii. The Migrating Motor complex (MMC) is responsible for propulsive movements in the colon during the fasting state
- iv. Chronic constipation can be a symptom of underlying systemic diseases like hypothyroidism or diabetes mellitus

A:-only i and ii

B:-only iii and iv

C:-only i and iv

D:-all of the above i, ii, iii and iv

Correct Answer:- Option-C

Question89:-Regarding parasitic infections of the intestine, which of the following are true?

- i. *Giardia lamblia* commonly causes steatorrhea due to its preference for the small intestine and interference with fat absorption
- ii. *Entamoeba histolytica* infection is typically characterized by watery diarrhea and can lead to liver abscesses.

- iii. Eosinophilia is a common finding in many intestinal helminthic infections
- iv. *Cryptosporidium parvum* infection is often self-limiting in immuno competent individuals but

can cause chronic, severe diarrhea in immuno compromised patients

A:-Only i, ii and iii

B:-Only i, iii and iv

C:-Only ii, iii and iv

D:-All of the above i, ii, iii and iv

Correct Answer:- Option-B

Question90:-A 28-year-old female undergoes a total proctocolectomy with ileal pouch-anal anastomosis (IPAA) for refractory ulcerative colitis. Which of the following are potential long-term complications of this procedure?

- i. Pouchitis, characterized by inflammation of the ileal pouch
- ii. Increased risk of colorectal cancer within the ileal pouch
- iii. Nutritional deficiencies, particularly of fat-soluble vitamins
- iv. Impaired fertility in females due to pelvic adhesions

A:-only i, ii and iii

B:-only i, iii and iv

C:-only ii, iii and iv

D:-all of the above i, ii, iii and iv

Correct Answer:- Option-B

Question91:-Which of the following statements is/are true regarding the applications of artificial intelligence (AI) in various gastrointestinal endoscopic procedures?

- i. Detection of malignancy within polyps
- ii. Detection and delineation of early dysplasia in Barrett's oesophagus
- iii. Differentiation of autoimmune pancreatitis from chronic pancreatitis
- iv. Gastric cancer detection and assessing depth of invasion

A:-only i, ii and iii

B:-only i, ii and iv

C:-all of the above i, ii, iii and iv

D:-only i, iv

Correct Answer:- Option-C

Question92:-Which one of the following is/are ileal bile acid transport inhibitor?

- i. Maralixibat
- ii. Elecaftor
- iii. Lumacaftor
- iv. Odevixibat

Choose the correct option

A:-Only (i and ii)

B:-Only (iii and iv)

C:-All of the above (i, ii, iii and iv)

D:-Only (i and iv)

Correct Answer:- Option-D

Question93:-Non-cirrhotic portal fibrosis (NCPF) should be suspected in the following situations.

- i. Unexplained splenomegaly
- ii. Variceal hemorrhage without any evidence of hepatocellular decompensation
- iii. Portal hypertension in the absence of cirrhosis/hepatocellular dysfunction
- iv. Unexplained chronic elevation in liver biochemistry

A:-Only (i, ii and iii)

B:-Only (ii, iii and iv)

C:-All of the above (i, ii, iii, iv)

D:-Only (i, iii and iv)

Correct Answer:- Option-C

Question94:-Choose the correct match with regard to progressive familial intrahepatic cholestasis (PFIC)?

- |                  |                |
|------------------|----------------|
| i. PFIC type 1   | 1. ABCB11 gene |
| ii. PFIC type 2  | 2. MDR3 gene   |
| iii. PFIC type 3 | 3. TJP2 gene   |
| iv. PFIC type 4  | 4. ATP8B1 gene |

A:-i-4, ii-1, iii-2, iv-3

B:-i-2, ii-4, iii-1, iv-3

C:-i-4, ii-3, iii-2, iv-1

D:-i-4, ii-2, iii-3, iv-1

Correct Answer:- Option-A

Question95:-Which of the following statements regarding management of Wilson Disease (WD) is/are true?

- i. A 'start low, go slow' treatment regimen is recommended for chelators, especially in patients with a neurological presentation.
- ii. Liver transplantation should be considered in patients with decompensated cirrhosis despite adequate medical treatment in WD
- iii. High-volume plasma exchange should be considered as a bridge to liver transplantation in WD
- iv. Liver transplantation should be contraindicated in patients with WD and neurological symptoms who need to be transplanted for decompensated cirrhosis

A:-Only (i, ii and iii)

B:-All of the above (i, ii, iii and iv)

C:-Only (ii, iii and iv)

D:-Only (ii and iii)

Correct Answer:- Option-A

Question96:-Which of the following statements about intestinal ultrasound (IUS) parameters in inflammatory bowel disease is/are true?

- i. A threshold of 3 mm is the recommended cut-off for presence of mural inflammation for both small and large bowel for defining bowel wall thickness
- ii. Ulcers are defined as depressions in the mucosal layer.
- iii. Stricture is defined as wall thickening with a narrowed lumen with or without a dilatation of a proximal loop
- iv. Fistula is defined as hypoechoic tract with or without hyperechoic content

A:-Only (ii and iii)

B:-All of the above (i, ii, iii and iv)

C:-Only (ii, iii and iv)

D:-Only (i, ii and iii)

Correct Answer:- Option-B

Question97:-Which of the following statements regarding intelligent wireless capsule endoscopy robots is/are true?

- i. Intelligent lesion detection
- ii. Integrated diagnostic and therapeutic function
- iii. High-speed-bi-directional communication
- iv. Passive motion navigation

A:-Only (i, ii and iii)

B:-Only (i, ii and iv)

C:-Only (ii and iii)

D:-All of the above (i, ii, iii and iv)

Correct Answer:- Option-A

Question98:-Which of the following statement about use of Artificial Intelligence (AI) in colonoscopy is/are true?

- i. AI-assisted systems potentially increase adenoma detection rates by 8%-10%.
- ii. The main benefit of computer aided detection systems is in detecting small adenomas.
- iii. Aids in the differentiation of neoplastic and nonneoplastic lesions

A:-All of the above (i, ii and iii)

B:-Only (ii and iii)

C:-Only (i and ii)

D:-Only (i and iii)

Correct Answer:- Option-A

Question99:-Endoscopic submucosal dissection (ESD) is preferred over endoscopic mucosal resection (EMR) in the management of all except

A:-Early-stage oesophageal adeno carcinoma (T1) or Barrett's nodular dysplasia; well-differentiated and nonulcerated cancer > 20 mm

B:-Early-stage oesophageal squamous cell carcinoma; well-differentiated; nonulcerated cancer > 15 mm

C:-Early-stage gastric adenocarcinoma; well or moderately differentiated, nonulcerated intestinal type cancer measuring 20 to 30 mm

D:-Early-stage gastric adenocarcinoma; well or moderately differentiated, nonulcerated intestinal type cancer measuring < 20 mm

Correct Answer:- Option-D

Question100:-Which of the following is/are Ultrasound based liver fat quantification methods?

- i. Attenuation coefficient
- ii. Backscatter coefficient
- iii. Controlled attenuation parameter
- iv. Proton density fat fraction

A:-All of the above (i, ii, iii and iv)

B:-Only (ii, iii and iv)

C:-Only (i, ii and iii)

D:-Only (ii and iii)

Correct Answer:- Option-C