Q1. Which of the following can cause a true infection as well as an infection in humans:
   a. Hymenolepis diminuta
   b. Hymenolepis nana
   c. Taenia solium
   d. Dipylidium caninum

   **NOTE**: Hymenolepis nana is one of the most common cestodes (a type of intestinal worm or helminth) infecting humans, especially children.

Q2. Which of the following statements is correct:
   Peritonitis could ensue without an initial focus of inflammation or abscess.

Q3. Which of the following statements is correct about D. latum:
   Procercoid larva is the infective stage for fish.

   **NOTE**: D. latum is a pseudophyllid cestode that infects fish and mammals.

Q4. Which of the following statements is correct:
   a. Some investigation methods for gastrointestinal viruses can reveal all viruses, but are not practical for diagnostic use.
   b. Both HBV & HCV can be treated by interferons
   c. Anti-HBc antibodies indicate high infectivity
   d. Fulminant hepatitis mostly affects pregnant women infected with HAV

Q5. Which of the following is correct:
   Caliciviruses infect both children and adults

   **NOTE**: Calicivirus infections commonly cause acute gastroenteritis, which is the inflammation of the stomach and intestines.

Q6. Which of the following statements is correct about trematodes:
   a. All trematodes need 2 intermediate hosts
   b. Adult Schistosomes do not usually cause the tissue damage caused by schistosomiasis.
c. A treatment with can treat the already happened Schistosomal dermatitis & Acute schistosomiasis

Q7. Which of the following statements is correct:
Some nematodes can live freely in nature or as human parasites.

Q8. Which of the following infections may result in surgery
gastroenteritis caused by Yersinia enterocolitica

NOTE>> the portal of entry of Yersinia enterocolitica is the gastrointestinal tract. The organism is acquired usually by insufficiently cooked pork or contaminated water, meat, or milk.

Q9. Which of the following statements is correct regarding food poisoning:
some Gram positive bacteria can produce a toxin similar to cholera toxin.

Q10. Which of the following statements is correct about protozoa:
E. histolytica can infect the brain.

Q11. The organism that gives a clinical manifestation similar to that caused by E. vermicularis is:
D. caninum. (pruritis ani)

Q12. Which of the following statements is correct:
although hepatitis virus B is specific for liver, it can cause kidney diseases.

NOTE >> HBV In addition to causing hepatitis, infection with HBV can lead to cirrhosis and hepatocellular carcinoma. It has also been suggested that it may increase the risk of pancreatic cancer.

Q13. Which of the following statements is correct:
Constipation is usually caused by neurotoxins.

Q14. Which of the following is incorrect
a. The characteristic villous microcirculation has led to the “countercurrent multiplier” mechanism
b. Bacterial overgrowth leads to a deficiency in all lipid soluble vitamins

Q15. Which of the following is incorrect
a. Asymptomatic intraluminal carriage may happen with any of the protozoan pathogens.
b. G. intestinalis mostly attacks the duodenum
c. String test is used for the diagnosis of Giardiasis
d. Answer: d
Q16. Which is incorrect
a. All spp of Shigella produce the same Shiga toxin
b. C. jejuni infection is most severe in elderly & immunocompromised
c. V. Parahaemolyticus can cause a watery diarrhea
d. P.shigelloides infection is caused by contact with cold-blooded animals
e. Cl. Perfringens toxin can act as a super antigen

PATHOLOGY

Q1. Oral candidiasis is mostly associated with all of the following except:
a. Diabetes mellitus
b. Anemia
c. AIDS
d. Debilitating childhood diseases
e. NSAIDs

Q2. Which is not a pre-malignant condition:
a. Leukoplakia
b. Angiodysplasia
c. Erythroplakia
d. Barrett’s esophagus

Q3. Which of these is not a cause of Peptic ulcers?
a. Autoimmune gastritis
b. Gastrin-secreting tumor
c. NSAID
d. Cigarette
e. Alcohol

NOTE>> peptic ulcer or stomach ulcer, is a break in the lining of the stomach, first part of the small intestine, or occasionally the lower esophagus. Its mostly caused by H.Pylo, NSAID, stress, diet.

Q4. Which of these tumors is most likely associated with an intraperitoneal spread to both ovaries?
a. Esophagus
b. Colon
c. Stomach
d. Appendix  
e. Small intestine

**Q5.** Which is the earliest pathology of celiac sprue?

a. Villous atrophy  
b. Crypt hyperplasia  
c. An increase in intra-epithelial lymphocytes

**NOTE>>** Celiac sprue is an autoimmune disorder of the small intestine that occurs in genetically predisposed people of all ages. Symptoms include pain and discomfort in the digestive tract.

**Q6.** Which of these is not a pathogenic mechanism of H. pylori?

a. Urease  
b. Flagellae  
c. Adhesin  
d. LPS coat  
e. …

**NOTE>>** There is general agreement that motility, urease activity, and association with gastric mucosal cells are important virulence factors of H. pylori.

**Q7.** After drinking so much alcohol, a patient is presented with painful bloody vomitus, which is most commonly the cause of this presentation?

a. Mallory-Weiss syndrome  
b. Hiatus Hernia  
c. Esophagitis

**NOTE>>** Mallory–Weiss syndrome refers to bleeding from tears (a Mallory-Weiss tear) in the mucosa at the junction of the stomach and esophagus, usually caused by severe alcoholism, retching, coughing, or vomiting.

**Q8.** Which of these is caused by an incomplete closure of the lateral folds?

a. Gastroschisis  
b. Meckel’s diverticulum  
c. Omphalocele

**NOTE>>** Gastroschisis represents a congenital defect characterised by a defect in the anterior abdominal wall through which the abdominal contents freely protrude.

**Q9.** Lack of ganglion cells in muscularis & submucosa is a feature of:

HIRSCHSPRUNG’S DISEASE
Hirschsprung’s disease (HD) is a disorder of the abdomen that occurs when part or all of the large intestine or antecedent parts of the gastrointestinal tract have no ganglion cells and therefore cannot function.

Q10. A peripheral blood picture showing characteristic burr cells, with vacuolation of small intestinal epithelium is a feature of:
A-Abetalipoproteinemia
b-Whipple’s disease

NOTE>> Abetalipoproteinemia is a rare autosomal recessive disorder that interferes with the normal absorption of fat and fat-soluble vitamins from food. abnormal star-shaped red blood cells (acanthocytosis); and fatty, foul-smelling stools (steatorrhea). The stool may contain large chunks of fat and/or blood.

Q11. Which of these is a distinguishing feature of Ulcerative colitis when compared to Crohn disease?
a. Focal patchy inflammation
b. Involvement of the colon
c. Granuloma
d. Cryptitis
e. Crypt distortion

Q12. On a rectal exam, a patient has a rectal mass, it’s mostly:
a. Hamartomatous
b. Inflammatory
c. Hyperplastic
d. Colon cancer

Q13. Which of these is not associated with secondary biliary cirrhosis?
a. Periportal fibrosis
b. Cholestasis
c. bile duct proliferation
d. Granulomas

Q14. Which of the following is the most common site of volvulus?
a. Sigmoid colon
b. Cecum
c. Appendix
d. Splenic flexure
Q15. Which of these sites is associated with the most benign behavior of a carcinoid tumor?
   a. Appendix
   b. Rectum
   c. Small intestine
   d. Stomach

Q16. Which of these is associated with the greatest risk of colon cancer?
   a. FAP
   b. Ulcerative colitis

Q17. Which of these is not a specific feature of Cirrhosis?
   a. Bridging fibrous septa
   b. Disruption of entire liver architecture
   c. Parenchymal nodules
   d. Irreversible end stage of chronic liver disease
   e. Ballooning degeneration of the hepatocytes

NOTE>> Ballooning degeneration of hepatocytes, is a form of liver parenchymal cell (i.e. hepatocyte) death. The cells undergoing this form of cell death increase in size (balloon). It is generally considered a form of apoptosis, and is a descriptor used in the context of inflamed fatty liver (steatohepatitis), which may be due to obesity or alcohol.

18. Which of these is not a complication of cholecystitis?
   a. cholangitis
   b. Cholangiocarcinoma
   c. Sepsis
   d. GB perforation
   e. intestinal ileus

Q19. Which of the following is not one of risk factors for cholesterol stones?
   a. Oral contraceptives (OCPs)
   b. Pregnancy
   c. Rapid weight loss
   d. Obesity
   e. Biliary infection

Q20. What is the most common cause of neonatal cholestasis?
   a. AAT deficiency
   b. Extrahepatic biliary atresi
GIS THEORY-EHSAN

Q21. Which of the following is incorrect?
a. “ground-glass” hepatocytes, “sanded” nuclei are seen in a HPV carrier
b. 50-65% of the cases of fulminant hepatitis is due to viral infection
c. In Autoimmune Hepatitis, High titers of autoantibodies (80%) including ANA, anti-sm, anti-mitochondrial antibodies are present
d. HBV contains an oncogenic sequence

Q22. Which of the following is incorrect regarding pancreatic carcinoma?
a. 60% arise in the head of pancreas
b. Vast majority are adenocarcinomas
c. Trousseau’s syndrome may be the presenting sign
d. Malignant epithelial neoplasm of endocrine portion of pancreas
e. 1 year survival is 10%

Q23. Mostly in young women with history of oral contraceptive pills (OCP) use:
a. Gall bladder carcinoma
b. Liver cell adenoma
c. HCC

PUBLIC HEALTH

Q1. What is the overall population attributable risk of diet in the development of Colon cancer?
a. 20%
b. 50%
c. 30%
d. 40%
e. >60%

Q2. Which if the following is not true about HAV?
a. Adults of high endemicity areas are usually immune / epidemics are uncommon.
b. In developed countries epidemics are usually of the common source type
c. Household exposure contributes the MOST to HAV infection
d. In high endemic areas it may be cost effective to screen for HAV before vaccination.
e. Passive immunization is recommended as early after exposure as possible

Q3. The least likely risk factor in HAV infection is:
a. Household exposure
b. Daycare center contact/diapered children
c. Male homosexual
d. Foreign travel to endemic areas

**BIOCHEMISTRY**

**Q1.** Pepsinogen 1 levels decreases in one of the following diseases:

a. Autoimmune gastritis
b. Duodenal ulcer
c. Chronic superficial gastritis
d. Acute gastritis

**Q2.** Glycogen storage disease IV caused by deficiency of one of the following enzymes:

a. amylo-1,6 glucosidase
b. **amylo-1,4-1,6 transglucosidase**
c. Lysosomal alpha(1,4)-glucosidase deficiency
d. glycogen phosphorylase

**Q3.** One of these statements is wrong regarding GIT enzymes:

a. Lingual and gastric lipase needs bile salts and colipase to be activated
b. Most of fat digestion in neonates is by Lingual lipase
c. Pancreatic lipase is a serine protease
d. Elastase I is increased in acute & relapsing chronic pancreatitis
e. Increased blood amylase levels in humans is found in Pancreatitis

**NOTE>>** lingual and gastric lipases unlike alkaline lipases (such as pancreatic lipase), do not require bile acid or colipase for optimal enzymatic activity.

**Q4.** At which concentration does Alcohol cause coma?

a. >500
b. 100
c. 50
d. 200

**Q5.** Hyperuricemia is caused by:

a. Diminished urinary excretion
b. Purine degradation
c. Increased G6P generation
d. All of the above
Hyperuricemia is an abnormally high level of uric acid in the blood. Alcohol consumption is the most important cause of it and there are a lot of causes like purine rich diet, insulin resistance and hypertension.

Q6. Which is not one of the metabolic fates of NADH?
   a. Conversion of pyruvic acid to lactic acid
   b. Synthesis of glycerol
   c. Ketone body formation
   d. Glucose synthesis

Q7. Which of these is not one of the effects of alcohol metabolism?
   a. Decreases sperm production
   b. Decrease production of estradiol
   c. Activation the enzyme CYP2E1
   d. Elevation of NADH concentration
   e. Micronutrient deficiency

Q8. Which of these is not a possible effect of a glycogen storage disease?
   a. Uric acid nephropathy
   b. Decrease in glycogen stores in the liver
   c. Lactic acidosis
   d. Hypertriglyceridemia

Q9. Which of these is most specific to the liver?
   1. AST
   2. ALT
   3. ALP
   4. ALP + AST
   5. None of the listed is more specific than the other

Q1. A condition in which the gut wall doesn't fuse in the 4th week is?
   a. Gastrochisis
   b. Umbilical hernia
   c. Congenital Omphalocele
Q2. Which of the following is a result of the embryonic rotation of the stomach?
   a. The right side will become posterior
   b. The right vagus trunk becomes anterior
   c. The ventral border turns to the left

Q3. The first primary tooth to erupt are?
   A: The lower central incisors

Q4. Which of these muscles is responsible for obstructing airway during anesthesia?
   A: Genioglossus

   NOTE>> The genioglossus is a muscle of the human body which runs from the chin to the tongue. It is the major muscle responsible for protruding the tongue. Contraction of the genioglossus stabilizes and enlarges the portion of the upper airway that is most vulnerable to collapse.

Q5. Where does the submandibular duct empty?
   A: Submandibular duct

Q6. Which is incorrect about direct inguinal hernia?
   a. It happens in the Inguinal triangle area bordered by: inf. Epigastric a., rectus abdominis, inguinal ligament
   b. It forms an inguinal sac by transversalis fascia
   c. Does not enter the scrotum
   d. Intestine bulges directly ant
   e. ...

Q7. Which of the following is correct?
   A: The portal triad is anterior to the foramen of Winslow

Q8. Which is incorrect regarding pancreatic development?
   A: The ventral bud is larger than the dorsal bud

   NOTE>> The pancreas first appears at approximately 5 weeks of gestation as two outpouchings of the endodermal lining of the duodenum just distal to the forming stomach. The outpouchings are the ventral and dorsal pancreas. The dorsal pancreas grows more rapidly than the ventral pancreas. In addition, the ventral pancreas rotates toward the dorsal pancreas as it is “carried” by the common bile duct.

Q9. Paneth cells are found in ______ and secrete ______
   A: Small intestine, lysozyme
Q10. Which is false about portal vein.
a. It is formed by the fusion of superior and inferior mesentric veins posterior to the neck of pancreas.
b. Ascends posterior to the 1st part of duodenum.

NOTE>> The hepatic portal vein is usually formed by the confluence of the superior mesenteric and splenic veins.

Q11. Which abdominal organ is not drained by the portal vein?
a. Liver  
b. Pancreas  
c. Gall bladder  
d. Stomach

Q12. All of the following sites can develop portosystemic shunts except:
a. transverse colon  
b. middle rectal  
c. inferior rectal  
d. esophageal

NOTE>> A portosystemic shunt (PSS), also known as a liver shunt, is a bypass of the liver by the body’s circulatory system. It can be either a congenital or acquired condition.

Q13. Which artery is a direct branch of the gastroduodenal artery:
a. right gastroepiploic artery.  
b. right gastric artery.  
c. left gastric artery.  
d. Inferior pancreaticoduodenal artery

Q14. The posterior third of the tongue is lymphatically drained by:
a. Submental lymph nodes.  
b. Submandibular lymph nodes.  
c. Superior deep cervical lymph nodes.  
d. Inferior deep cervical lymph nodes.

Q15. All of the following pharyngeal muscles are innervated by nerve X except:
a. Salpingopharyngeus  
b. Stylopharyngeus  
c. Palatopharyngeus

Q16. As a young surgeon, you would choose which incision to perform an open cholecystectomy:
a. Median, supra-umbilical
b. Paramedian
c. Median
d. Kocher's
e. Pfannenstiel

**NOTE>>** Kocher’s incision - An oblique incision made in the right upper quadrant of the abdomen, classically used for open cholecystectomy

**Q17.** The 4-layered part of the peritoneum is:
a. Gastrocolic ligament
b. Lesser omentum
c. Gastrophrenic ligament
d. Gastroplenic ligament

**Q18.** Which of these is a branch of the gastroduodenal artery?
a. Superior pancreaticoduodenal
b. Right gastric
c. Left gastric
d. Left gastroepiploic
e. Inferior pancreaticoduodenal

**Q19.** Which of the following a cc of the pancreas?
a. Striated ducts
b. Centroacinar cells

**Q20.** How many acinar cells are there in each acinus?
a. 4-5
b. 40-50
c. 30-40
d. 20-30
e. 10-20

**Q21.** Which of these is retro-peritoneal?
A: Duodenum, Ascending colon, & Abdominal esophagus

**Q22.** What is the most common congenital anomaly of the gut?
A: Meckel’s Diverticulum

**Q23.** Transverse folds of submucosa are called?
a. Plicae Circulares
b. Microvilli
d. Villi
GIS THEORY-EHSAN

Q24. Brunner’s Glands are found in _________ & they secrete:
A: Duodenum, mucous alkaline fluid

Q25. The quadrato lope lies between:
A: Gall bladder & ligamentum teres

Q26. The muscles in the wall of the GIT are derived from:
a. Endoderm
b. Neural crest
c. Splanchnic mesoderm
d. Somatic mesoderm

PHYSIOLOGY

Q1. Which of the following is correct?
a. The chewing reflex is purely mediated by neurons
b. You can stop the Pharyngeal phase voluntarily
c. In the esophageal stage, peristaltic waves originate from the pharynx
d. The respiration is held at mid-inspiration during the pharyngeal stage

Q2. Which of the following is incorrect about saliva?
a. Saliva production is controlled by salivary center in medulla
b. pH of the saliva is acidic
c. Proline-rich proteins prevent Dental caries
d. Na+ absorption and K+ secretion is increased by aldosterone
e. Saliva entering the mouth is hypotonic

NOTE>> The normal pH range for saliva is considered to be 5.6 to 7.9. This keeps the pH balance in the body close to neutral.

Q3. Which of the following is correct?
Pepsin digests the inter-cellular matrix of meat

Q4. Which is incorrect?
a. Gastic secretion is inhibited at a pH <2
b. Gastic secretion is inhibited by somatostatin
c. After a meal, the pH of the blood drained from the stomach is elevated
d. Some absorption of food occurs in the stomach  
e. ...

Q5. Which of these is no one of the modifications that the gall bladder does to bile?  
A: Increases the pH of bile

Q6. Which of these is not a function of Gastrin?  
A: Contraction of pyloric sphincter

Q7. Which of these is incorrect regarding Migrating Motor Complexes?  
 a. Cycles of motor activity traveling from the stomach to the ileum  
b. The function is to clear the stomach & small intestine from their contents  
c. Stops immediately after ingestion of food  
d. Occurs during periods of fasting  
e. They’re stimulated by gastrin

Q8. Which is incorrect about the peristaltic rush?  
 a. Caused by intense irritation of the intestinal mucosa  
b. It sweeps the contents of the intestine into the colon  
c. It is initiated by ANS, brain stem, & myenteric plexus  
d. It is usually week

Q9. Which of the following is correct?  
 a. Water-soluble vitamins are absorbed by diffusion  
b. Absorption of vitamin B12 occurs by secondary active transport with Na  
c. Dipeptides & Tripeptides are absorbed by secondary active transport with Na

Answer: a! *It’s the doctor’s answer

Q10. Which of these is not a function of hepatocytes?  
 a. Storage of Vitamin B12  
b. Synthesis of cholesterol  
c. Secretion of bile salts  
d. Excretion of bilirubin  
e. Storage of vitamin A
Q1. Which of the following mechanisms is mismatched:  
ciprofloxacin ________ protein synthesis inhibition

Q2. How would you treat a patient with hepatic problems, using drug X, which is metabolized in the liver:  
a. Decrease the dose.  
b. Find alternative  
c. Monitor the blood concentration of the drug  
d. Follow up liver enzymes  
e. All of the mentioned

Q3. Paracetamol toxicity is due to the accumulation of _______, and is treated by ________ which augments the enzyme responsible for its clearance:  
a. NAPQI, N-acetyl cysteine.

Q4. Which is incorrect about Sucralfate?  
a. Is a complex of aluminium hydroxide and sulphated sucrose.  
b. Activated at pH < 4 forming a sticky gel-like material  
c. Has an acid neutralizing action  
d. Delays gastric emptying  
e. Augmenting gastric mucosal PG synthesis

Q5. Which of these is used in vomiting that accompanies vertigo (Meniere's disease)?  
a. Meclizine  
b. Cyclizine  
c. Diphenhydramine  
d. Promethazine  
e. Cinnarizine

Q6. Which of the following is incorrect?  
A: Benzodiazepines are strong anti-emetics
Q7. Bulk forming laxatives exerts effect by all of the following except:
a. Osmotically draw water into the GI tract
b. Lubricating the surface of feces
Answer: a?, Maybe

Q8. Which of the following is correct:
A: Cimetidine has an antiandrogenic effect.

Q9. Antiulcer drug that can cause B12 deficiency:
A: Omeprazole.

Q10. An antiemetic with prokinetic activity:
A: Domeperidone

Q11. An antiemetic, used for chemotherapy-induced emesis, which can cause diarrhea:
A: Dolasetron

Q12. Extrapyramidal symptoms with:
A: Metclopramide

GOOD LUCK