



Test Booklet Serial No.

Series No. :

Number of Questions: 120

Time Allowed: 2 hours

Booklet Contains Pages: 36

Max. Marks: 480

| PLEASE DO NOT | OPEN TH | ETEST | BOOKLET | UNTIL | ASKED | T0 | DO | SO. | BY I | INVIGIL | ATOR. |
|---------------|---------|-------|---------|-------|-------|----|----|-----|------|---------|-------|
|---------------|---------|-------|---------|-------|-------|----|----|-----|------|---------|-------|

| Name of the Candidate |                          |
|-----------------------|--------------------------|
| Roll No.              |                          |
| Center of Examination |                          |
| Date of Examination   |                          |
| Candidate's Signature | Signature of Invigilator |

## SOME IMPORTANT INSTRUCTIONS TO THE CANDIDATES

- 1. Each question carries 4 marks. For each correct response the candidate will get 4 marks. For each incorrect answer, 1 mark will be deducted from the total score.
- 2. Use only **BLUE / BLACK BALL POINT PEN** for darkening the appropriate circle completely.

  For example:

  (B)
  (C)
- 3. Rough work is to be done only on the Test Booklet and not on the answer sheet.
- 4. Make sure that you do not possess any pages (Blank or Printed) of any unauthorized material. If such material is found in your possession during the examination, you will be disqualified for admission.
- 5. If you are found copying/helping others, you will be disqualified for admission.
- 6. Candidate found in possession of Cellular Phone/Mobile Phone/Cordless Phone/Communication device/Pager/Scanner whether using or not using will be liable to be debarred for taking examination(s) either permanently or for a specified period or and dealt with as per law or/and ordinance of the university according to the nature of offence, or/and she/he may be proceeded against and shall be liable for prosecution under the relevant provision of the Indian Penal Code.
- 7. At the end of the examination hand over the text booklet and answer sheet to the invigilator.
- 8. Do not leave the examination hall until you are asked to do so.
- 9. Count the pages of the booklet on receipt. If any defect found in the booklet ask the invigilator to provide a fresh copy.

(A) Shigella

(B) Enterotoxigenic E coli

(C) Travellor's diarrhea

(D) Amoebic colitis

2. The small intestinal mucosa has how many layer (s) of the epithelium cells?

(A) One

(B) Two

(C) Three

(D) More than three

3. Which of the following HCV genotype is difficult to treat?

(A) Genotype 1 and 4

(B) Genotype 2 and 3

(C) Genotype 1 and 2

(D) Genotype 1 and 3

4. All of the following are the histological features of primary biliary cirrhosis, expect:-

(A) Destruction of medium and small bile ducts

(B) Peri-ductal granuloma

(C) Decrease in interlobular ducts

(D) Bile lakes



- 5. Which of the following is false about Mirizzi's syndrome?
  - (A) Jaundice is common
  - (B) Stone is impacted at neck of gall bladder
  - (C) On ultrasound, the CBD is dilated till lower end
  - (D) It is an uncommon complication of gallstones
- 6. A 25 years lady was earlier diagnosed to have Crohn's disease. She reported back with a positive pregnancy test. Which of the following drug, the physician will not prescribe?
  - (A) Azathioprine
  - (B) Methotrexate
  - (C) Sulphasalazine
  - (D) Prednisolone
- 7. Which of the following statements regarding Angio Ectasia (AE) are true?
  - (A) It is the most common cause of recurrent lower GI bleed in patients > 60 years
  - (B) Most common site of AE is caecum and ascending colon
  - (C) Size of AE is usually < 10 mm
  - (D) All of the above
- 8. Which of the angiographic signs does not suggest the diagnosis of colonic Angio Ectasia (AE):—
  - (A) A slowly emptying, dilated tortuous vein
  - (B) Persistent caliber artery
  - (C) Early filling vein
  - (D) Vascular tuft



9. Which of the following conditions can be a presentation of CMV infection in HIV positive patients? (A) Papillary stenosis Colonic perforation (C) Cholecystitis (D) All of the above 10. Which of the following statements regarding squamous cell carcinoma of the Anal canal is TRUE? (A) Frequency is higher in homosexual men (B) Causative agent is Human papilloma Virus (HPV) (C) Cytological smear of anal canal can be used as a screening test (D) All of the above 11. Which of the following disease is characterized by recurrent oral ulcerations? (A) Behcet's disease Systemic lupus erythematous (C) Celiac disease (D) All of the above Which of the following is not a characteristic feature of Abetalipoproteinemia? 12. (A) Steatorrhea (B) Xanthelasma

(C) Ataxia

(D) Acanthotic erythrocytes



- 13. Which of the following statements is TRUE regarding abdominal migraine?
  - (A) Characterized by recurrent episode of abdominal pain and vomiting
  - (B) More common in children than adults
  - (C) Headache may be absent
  - (D) All of the above
- 14. Which of the following statements regarding GI Mycobacterium avium intracellulare (GI MAC) infection of the small intestine is TRUE:-
  - (A) GI MAC infection of the small intestine is largely asymptomatic
  - (B) Endoscopic biopsy of the duodenum is the best way to make the diagnosis
  - (C) Acid fast stain large number of bacilli in the host macrophages in the lamina propria
  - (D) All of the above
- 15. Which of the following tests can be used to make diagnosis of intestinal MAC infection in AIDS?
  - (A) Duodenal biopsy with Acid Fast staining
  - (B) Blood culture
  - (C) Fecal exam by acid fast staining
  - (D) All of the above
- 16. Which of the following statements are true regarding CMV enteric infection in immune compromised host?
  - (A) The commonest presentation is abdominal pain with chronic diarrhea
  - (B) Endoscopic hallmark of CMV infection is sub epithelial hemorrhages and mucosal ulceration
  - (C) Demonstration of viral inclusion bodies in biopsy specimen is diagnostic of CMV infection
  - (D) All of the above





- 17. Which of the following statements are true regarding GI involvement in Progressive systemic sclerosis?
  - (A) Esophageal involvement is seen in 20% of these with severe cutaneous involvement
  - (B) Esophagageal stricture characteristically occur in the upper 1/3 of the esophagus
  - (C) Malabsorption and steatorrhea is present upto 1/3 of patients
  - (D) All of the above
- 18. Which of the following statements regarding GI and liver manifestations of Polyarteritis Nodesa (PAN) is TRUE?
  - (A) The most common GI manifestation of PAN is abdominal pain
  - (B) Prevalence of HBsAG positivity in PAN ranges between 10-30%
  - (C) Characteristic feature of PAN is the finding of aneurysmal dilatation upto 10 mm on visceral angiography
  - (D) All of the above
- 19. Which of the following statements regarding opportunistic infections (OI) of the liver in AIDS is TRUE?
  - (A) MAC is the commonest OI of liver in developing countries
  - (B) Commonest cause of non caseating granuloma in liver biopsy of patients with AIDS in the West is CMV infection
  - (C) Toxoplasma gondii prophylaxis should be started when CD4 count below 350
  - (D) Cryptosporidial infection of the bile duct can mimic primary sclerosing cholangitis

| 20. | Sites                   | s of Amyloid deposition in the liver is/are:-   |
|-----|-------------------------|---|
|     | (A)                     | Space of disse  |
|     | (B)                     | Portal tracts   |
|     | (C)                     | Hepatic artery branches   |
|     | (D)                     | All of the above  |
| 21. | Нера                    | atic granuloma may be found in which of the following conditions:-  |
|     | (A)                     | Sarcoidosis   |
|     | (B)                     | Celiac disease  |
|     | (C)                     | Behcet's disease  |
|     | (D)                     | All of the above  |
| 22. | Whic                    | ch of the following is NOT a clinical presentation of Hepatic Sarcoidosis?  |
|     | (A)                     | Incidental detection of granuloma on liver biopsy with raised serum alkaline phosphates   |
|     | (B)                     | Severe intrahepatic cholestasis   |
|     | (C)                     | Cirrhosis with portal hypotension   |
|     | (D)                     | None of the above   |
| 23. | bleed<br>had r<br>S bil | years old male had with ascites for 2 years and had an episode of UGI ding about 2 months back. At the time of presentation to the hospital, he massive ascites. He was conscious and oriented. His investigations reveled: irubin 1 mg/dL, ALT 75U/dL, serum albumin 2.8mg/dL, prothrombin time ec (control 12 sec). What is the Child Pugh score in this patient? |
|     | (A)                     | 5   |
|     | (B)                     | 8   |
|     | (C)                     | 11  |

(D) 14



- 24. Which of the following is the goal of treatment of achalasis?
  - (A) Improvement in the esophageal peristalsis
  - (B) Improvement of the lower esophageal sphincter relaxation in response to swallowing
  - (C) Reduction of resting lower esophageal sphincter pressure
  - (D) Reduction in esophageal body diameter
- 25. Which of the following neurotransmitter is deficient in patients with achalasia?
  - (A) Acetylcholine
  - (B) Nitric oxide
  - (C) Substance P
  - (D) Motilin
- 26. A 40 years old male was having recurrent biliary colic and was found to have gallstones. His liver function test showed mild conjugated hyperbiliruminemia, a normal ALT, AST and alkaline phosphatase. He was taken for laparoscopic cholecystectomy. At laparoscopy, the surgeon noticed that the liver was brownish in color. A diagnosis came to his mind? What diagnosis came to his mind?
  - (A) Dubin Johnson syndrome
  - (B) Rotor syndrome
  - (C) Criggler Najjar syndrome Type 2
  - (D) Gilbert's syndrome
- 27. Which of the following is incorrect about the genome of Hepatitis C Virus?
  - (A) The HCV virus is a capsulated virus
  - (B) The genome is single stranded
  - (C) The genome is circular
  - (D) The HCV genome has 9400 nucleotides



- 28. Knodell score is used for assessment of histological activity of which of the following diseases?
  - (A) Histological activity of ulcerative colitis
  - (B) Histological activity of Crohn's disease
  - (C) Histological activity of chronic hepatitis
  - (D) Histological activity of chronic gastritis
- 29. Which of the following is the most appropriate test for detection of hepatocellular carcinoma?
  - (A) Ultrasound of the abdomen
  - (B) Triplephase CECT
  - (C) T<sub>c</sub> 99 Scan
  - (D) Alpha fetoprotein
- 30. All of the following are risk factor for formation of pigment stone EXCEPT:-
  - (A) CYP7A 1 gene mutation
  - (B) Chronic hemolysis
  - (C) Alcoholic cirrhosis
  - (D) Cystic fibrosis
- 31. Which of the following is the defining criteria for severe acute pancreatitis?
  - (A) Organ failure
  - (B) CT severity index > 8
  - (C) CT severity index > 6
  - (D) CT severity index = 10



- 32. A 40 years old male was diagnosed to have pulmonary tuberculosis and was put on anti-tuberculous drugs, after four weeks of institution of anti-tuberculous drugs, he developed vomiting and jaundice. Liver function showed Serum bilirubin 8 mg/dL, ALT 210 U/dL, serum albumin 3.9 g/dL, prothrombin time 21 sec (control 14 sec). Ultrasound revealed normal exhotexture of the liver and viral markers wre negative. You will like to do all of the following EXCEPT:—
  - (A) Stop hepatotoxic anti-tuberculous drugs
  - (B) Infuse fresh frozen plasma
  - (C) Advice normal diet
  - (D) Advice rest
- 33. The diameter of ileum of a healthy volunteer on entereoclysis is :-
  - (A) 1.5 cm

(B) 2.5 cm

(C) 3.5 cm

- (D) 4.5 cm
- 34. All of the following cells have regenerative capacity, EXCEPT:-
  - (A) Bone marrow cells
  - (B) Cells at the intestinal crypts
  - (C) Cells at the intestinal villous tip
  - (D) Megakaryocytes
- 35. Which one of the following is the function of nucleotide binding oligomerazation domain 2 (NOD2) gene product?
  - (A) The protein is involved in the recruitment of T cells
  - (B) The protein helps in the recruitment of macrophages and helps in formation of granuloma
  - (C) The protein helps in the cell division
  - (D) The protein is a sensor for the bacteria

- 36. A 60 years old male with progressive systemic sclerosis complained of worsening bloating. The glucose hydrogen breath test confirmed presence of small intestinal bacterial overgrowth. His symptoms improved with antibiotics. What is the likely root cause of his symptoms?
  - (A) Absent colonic high amplitude propagating contractions
  - (B) Decreased lower esophageal sphincter pressure
  - (C) Increased function of the intestinal interstitial cells of Cajal
  - (D) Absent migrating motor comples
- 37. Following acute HCV infection, the spontaneous clearance of the HCV have been found to be associated with all of the following EXCEPT:—
  - (A) Younger age at infection
  - (B) Icteric hepatitis
  - (C) IL 28 B polymorphism
  - (D) Community acquired acute HCV infection
- 38. Forest plot is associated with:
  - (A) Met-analysis
  - (B) Randomized controlled trial
  - (C) Case control study
  - (D) Cohort study
- 39. Which of the following is false?
  - (A) Sensitivity means true positive
  - (B) Specificity means false negative
  - (C) Chi Square test is used for analysis of Quantitative data
  - (D) Chi Square test uses 2×2 table

|     | 7  |
|-----|----|
| EPT | :- |
|     |    |

| 40. | All | of the following are associated with Innate immune response, EXCEPT :-   |
|-----|-----|--|
|     | (A) | Epithelial cells   |
|     | (B) | Macrophages  |
|     | (C) | Natural killer cells   |
|     | (D) | Lymphocytes  |
| 41. |     | ich of the following therapies used for IBD have been associated with elopment of Hepatosplenic T cell lymphoma (HSTCL)? |
|     | (A) | Steroids   |
|     | (B) | Cyclosporine   |
|     | (C) | Tacrolimus   |
|     | (D) | Azathioprine with Infliximab   |
| 42. | Whi | ch of the following is true regarding cell cycle?  |
|     | (A) | DNA replication occurs in M phase  |
|     | (B) | Cell division occurs in G 1 phase  |
|     | (C) | Cytoplasmic division occurs in M Phase   |
|     | (D) | M Phase is the longest part of cell cycle  |
| 43. | All | of the following are associated with apoptosis, EXCEPT:-   |
|     | (A) | Caspases   |
|     | (B) | BCL 2  |

(C) Cytochrome C

(D) Zonulin

\*\*

- 44. A 40 years old person suffering from hemochromatosis, undergoes regular phlebotomies. Once we remove 300 mL of blood, how much iron is removed from the body?
  - (A) 50-70 mg
  - (B) 100-150 mg
  - (C) 200-300 mg
  - (D) 300-400 mg
- 45. A 60 years male patient presented with obstructive jaundice due to periampullary carcinoma. The serum bilirubin was 30 mg/dL. The tumor was resectable and as part of pre-operative biliary drainage, a 10 F and 10 cm plastic stent was place in the CBD. What was the internal diameter of the plastic stent which was deployed?
  - (A) 3 mm
  - (B) 5 mm
  - (C) 7 mm
  - (D) 10 mm
- 46. All of the following is required for effective defecation, EXCEPT:-
  - (A) Increase in intrarectal pressure
  - (B) Contraction of puborectalis
  - (C) Relaxation of external anal sphincter
  - (D) Relaxation of internal anal sphincter



- 47. A 46 years old male presented with symptoms of constipation for 20 years. He passes stool every day but complains of persistent desire to pass stool. He did not have much of abdominal pain. He also complains of incomplete evacuation. There was no weight loss or gastrointestinal bleeding. Which of the following is the most likely diagnosis in this patient?
  - (A) Slow transit constipation

30

- (B) Pelvic floor dyssynergia
- (C) Irritable bowel syndrome
- (D) Solitary rectal ulcer syndrome
- 48. Bocepravir, a new class of drug, has recently approved recently in the treatment of Hepatitis C Virus infection Protease inhibitor. Bocepravir act by inhibiting which of the following part of HCV?
  - (A) Core region
  - (B) NS3 region
  - (C) NS5- A region
  - (D) NS5-B region
- 49. Single nucleotide polymorphisms (SNP) is associated with disease or therapeutic response. The SNP is:-
  - (A) Single base change in a DNA sequence that occurs inn >1% of the population
  - (B) Single base change in a DNA sequence that occurs inn <1% of the population
  - (C) Any change of DNA sequence in population
  - (D) Same as mutation

- 50. Biofeedback is effective in which of the following condition?
  - (A) Fecal incontinence
  - (B) Achalasia cardia
  - (C) Intestinal pseudo-obstruction
  - (D) Hirshprung's disease
- 51. Which of the following is false?
  - (A) Approx. 0.5g of bile acid is synthesized per day
  - (B) The bile acid pool in humans is 4g
  - (C) The bile loss in stool per day is about 4g/day
  - (D) The entero-hepatic circulation of pool of bile occurs 6-8 times per day
- 52. A 20 years young boy with severe mitral stenosis presents abdominal pain. He was advised a diagnostic endoscopy. You will do which of the following?
  - (A) Prophylactic antibiotic : Amoxycillin
  - (B) Prophylactic antibiotic: Metronidazole
  - (C) Prophylactic antibiotic: Ceftrioxone
  - (D) No prophylactic antibiotic
- 53. Which of the following is false for cricopharyngeal bar?
  - (A) It is because of fibrosis of circopharyngeus muscle
  - (B) Cricopharyngeal myotomy is the usual treatment
  - (C) The bar is seen anteriorly on the barium swallow(lateral view)
  - (D) They may present with dysphagia



- 54. A 40 years old lady presents with feeling of lump in the throat. She did not have dysphagia. She was diagnosed to have globus pharyngeus. She underwent a barium swallow which showed:
  - (A) Dilatation of upper esophagus
  - (B) Narrowing of upper esophagus
  - (C) Delayed peristalsis
  - (D) Normal study
- 55. On a routine physic al exam, a 37 year old man is found to have a hematocrit of 32, an MCV of 75 and an iron saturation of 5%. He is has no GI complaints and has never seen any blood in his stool or black stools. He denies ingesting aspirin or NSAID's. On physical exam he has a scaly, erythematous rash around his eyebrows which he has had for many years and which has been diagnosed as seborrheic dermatitis. An upper endoscopy and colonoscopy are completely normal. Small bowel video capsule was ordered. Which lesion is more likely to be present in the small bowel of this patient than in a healthy 70 year old man?
  - (A) Angiectasia
  - (B) Small bowel tumor
  - (C) Celiac sprune
  - (D) NSAID enteropathy
- 56. Presence of Mallory hyaline bodies in liver biopsy which of following is most likely:
  - (A) Is taking amiodarone for cardiac rhythm disturbances
  - (B) Is taking anabolic steroids for muscle building
  - (C) Is a woman with intense itching
  - (D) Has chronic obstructive lung disease

- 57. 45 years old female nurse with 2 weeks of nonbloody diarrhea. The next appropriate test would be:
  - (A) Colonoscopy
  - (B) Stool for *Clostridium difficile* and metronidazole 500 mg po qid for 14 days if positive
  - (C) EGD with duodenal aspirate
  - (D) Stool leukocytes
- 58. Elderly gentlemen with Barrett's esophagus without dysplasia. Recommendations include:
  - (A) Endoscopic surveillance in 1 year
  - (B) Daily proton pump inhibitor to control heartburn symptoms
  - (C) Anti-reflux surgery to reduce the risk of esophageal cancer and control symptoms
  - (D) Endoscopic ablation to prevent esocphageal cancer
- 59. Young man presents with coffee-ground emesis. He is hemodynamically stable and HBb is 10.1 gm/dl. An endoscopy revealed a clean based 2 cm gastric ulcer. The patient should be managed with:
  - (A) Injection therapy and electrocautery
  - (B) Oral proton pump inhibitors and outpatient follow up with a repeat endoscopy in 3 months
  - (C) Antibiotics for 10 days for presumed. H. pylori infection
  - (D) Hospital admission for observation due to the risk of re-bleeding







- 60. 64 years old female with long standing Crohn's disease experiences a recurrence of her symptoms several years after a long remission. Which of the following is the best first step:
  - (A) Search for enteric infections, including C. difficile
  - (B) Serum gastrin level
  - (C) Long term 5-adminosalicylic acid to induce and maintain her in remission
  - (D) 6 mercaptopurine (6-MP) or azathioprine
- 61. A 56 year old male presents with upper abdominal pain. Endoscopy reveals numerous gastric and duodenal ulcers. Patient denies NSAID use. A gastrin level is checked and is 2000 pg/ml. Which of the following is the next best step in management?
  - (A) H.pylori treatment
  - (B) Gluten free diet
  - (C) Octreotide scan
  - (D) Sucral fate
- 62. Which of following is true about hepatic veins?
  - (A) In 80 % of person right and middle hepatic veins join before entering vena cave
  - (B) In 805 of person left and middle hepatic veins join before entering vena cava
  - (C) In 80% of person right and left hepatic veins join before entering vena cava
  - (D) In 80% of person all hepatic veins open separately in vena cava





| 63. D | ecreased | hepcidin | level | is | associated | with | all | EXCEPT | : |
|-------|----------|----------|-------|----|------------|------|-----|--------|---|
|-------|----------|----------|-------|----|------------|------|-----|--------|---|

- (A) Diminished macrophage iron stores
- (B) Increased duodental iron absorption
- (C) Loss of functional HFE protein
- (D) Reduced iron release from macrophages

## 64. Most common genotype of hepatitis B in India is:-

- (A) Genotype A
- (B) Genotype B
- (C) Genotype D
- (D) Genotype E
- 65. Fibrosing cholestatic hepatitis following liver transplantation for hepatitis B is reported in:—
  - (A) 20%
  - (B) 30%
  - (C) 10%
  - (D) 25%
- 66. A 25-year-old female presents for follow-up. She has a 6-year history of Crohn's disease for which she is currently being managed with anti-TNF therapy. Which of the following is not a health maintenance recommendation for this patient?
  - (A) Zoster vaccine
  - (B) Pneumococcal vaccine
  - (C) HPV vaccine
  - (D) Hepatitis B vaccine



- 67. 40-year-old male with cryptogenic cirrhosis is being evaluated for liver transplantation. He has developed worsening ascites and marked lower extremity edema despite sodium restriction and maximum dose of diuretics. Triple-phase abdominal CT scan was unremarkable. Doppler cardiac echography reveals pulmonary hypertension. MELD (model for end-stage liver disease) score is 23. Which of the following is the most appropriate next step?
  - (A) Increase diuretics, follow-up closely, and perform a repeat Doppler cardiac echogram
  - (B) List for liver transplant
  - (C) Right heart catheterization
  - (D) Coronary angiography
- 68. Pharmacological treatment of acute variceal bleeding. Which intravenously administered drug has been shown to have a mortality benefit in comparison with a placebo?
  - (A) Vasopressin
  - (B) Somatostatin
  - (C) Octreotide
  - (D) Terlipressin
- 69. Regarding hepatitis B infection which of following is not correct?
  - (A) HBs Ag positive with normal liver enzymes suggests a healthy carrier
  - (B) IgM anti-HBc is used to identify chronic hepatitis
  - (C) Anti-HBs implies prior infection and immunity
  - (D) HBV DNA positive pre-transplantation may be followed by severe recurrent disease



- 70. Which is the BEST marker of liver function in acute liver failure?
  - (A) Prothrombin time
  - (B) Serum Albumin
  - (C) Serum ammonia
  - (D) Serum bilirubin
- 71. Which of the following is not found in acute liver failure?
  - (A) Raised ALT
  - (B) Jaundice
  - (C) Encephalopathy
  - (D) Centrilobular or panacinar necrosis
- 72. Following is true for gastrointestinal bleeding:
  - (A) Oesophageal ballon should be inflated first in a Sengstaken tube
  - (B) Somatostain decreased mortality
  - (C) Colonic angiodysplasia is a rare cause of lower GI bleeding in the elderly
  - (D) Complications commonly occur in endoscopic sclerotherapy
- 73. In acute liver failure which one of the following is TRUE?
  - (A) Cerebral oedema is an unusual cause of death
  - (B) Late administration of glutathione is unwarranted in paracetamol induced hepatic failure
  - (C) INR is a sensitive index of liver function
  - (D) Renal failure rarely occurs in paracetamol induced hepatic encephalopathy



- 74. As per AASLD guidelines for treatment of HCV (2014) recommendations for treatment of HCV, genotype 3 includes all EXCEPT:-
  - (A) Sofosbuvir + Ribavirin x 24 weeks
  - (B) Sofosbuvir + Pegylated interferon/Ribavirin x 12 weeks
  - (C) Pegylated interferon/Ribavirin x 24 weeks
  - (D) None of the above
- 75. Intraparenchymal fluid collections due to pancreatitis within 4 weeks are called:-
  - (A) Pancreatic pseudocyst
  - (B) Peripancreatic fluid collection
  - (C) Acute necrotic collection
  - (D) Pancreatic abscess
- 76. Which of following is not correct regarding choledochal cyst?
  - (A) Risk of cholangiocarcinoma is increased
  - (B) Diagnosis is made by ultrasound abdomen, MRI and ERCP
  - (C) 50% present with triad of pain. Jaundice and abdominal mass
  - (D) Treatment is surgical excision
- 77. Which of the following is not true regarding blood supply of pancreas?
  - (A) Pancreas receives blood supply from coeliac trunk superior mesenteric artery
  - (B) Body and tail of pancreas is supplied by Splenic artery
  - (C) Posterior superior pancreaticoduodenal artery is a branch of Superior mesenteric artery
  - (D) All major pancreatic arteries lie posterior to pancreatic ducts



- 78. Which of the following hormones is not released in duodenum?
  - (A) Gastrin
  - (B) Motilin
  - (C) Somato statin
  - (D) Peptide YY
- 79. Which of the following is not reported in Carcinoma pancreas?
  - (A) Activation of Kras oncogene
  - (b) Mutation of p53 oncogene
  - (C) BRCA 2 mutation
  - (D) Under expression of EGFR receptors
- 80. False about Intrapapillary mucinous neoplasm of pancreas is:-
  - (A) It is more common in the head of pancreas
  - (B) Diagnosis is made when mucus is seen extruding through the papillary orifice
  - (C) Columnar epithelium lines the walls and form papillary projections
  - (D) They don't follow and adenoma carcinoma sequence
- 81. Which is false regarding Haemangioendothelioma of liver?
  - (A) It is a rare tumor
  - (B) It is highly vascular
  - (C) It involves both lobes of the liver
  - (D) In 50% cases it has extrahepatic spread



- 82. Which is not a paraneoplastic syndrome for Hepatocellular carcinoma?
  - (A) Hypercalcemia
  - (B) Hypoglycemia
  - (C) Erythrocytosis
  - (D) Hyperglycemia
- 83. Which of the following is false regarding patient selection in Transarterial chemoembolization (TACE) for hepatocellular carcinoma?
  - (A) HCC is more responsive to TACE
  - (B) TACE can be safely given in decompensated liver disease
  - (C) Patency of portal vein should be established prior to TACE
  - (D) Renal functions should be evaluated while instituting TACE
- 84. Which of the following statement is true for epiphrenic diverticulum?
  - (A) Surgery or Endoscopic Intervention is required in almost all cases at detection
  - (B) Most of these diverticulum of esophagus are primary
  - (C) Most of the epiphrenic diverticula are on the right
  - (D) These are also known as traction or mid esophageal diverticula
- 85. What is not true regarding Cholangiocarcinoma?
  - (A) Intrahepatic cholangiocarcinoma is the least common type anatomically
  - (B) Primary resection is the main treatment
  - (C) Liver Transplant is the main treatment
  - (D) A multidisciplinary term should evaluate and manage all patients of cholangiocarcinoma



- **S7**)
  - 86. Which of the following statement is false regarding Barrett's esophagus?
    - (A) Barrett's mucosa predisposes to Squamous cell carcinoma of esophagus
    - (B) Risk of Cancer is 0.5% per year
    - (C) Prevalence in West is 2-7%
    - (D) Intestinal type of mucosa with goblet cells is the most common histopathological finding
  - 87. Most common site of gastric ulcer is:-
    - (A) Incisura
    - (B) Greater curvature stomach
    - (C) Fundus of stomach
    - (D) Antrum
  - 88. Which of the following is not a sign of malignant ulcer on radiographic studies?
    - (A) Carmen sign
    - (B) Hampton's line
    - (C) Nodular gastric ulcer mound
    - (D) Abrupt transition between normal and abnormal mucosa several cms away from the ulcer crater
  - 89. Most common extraintestinal manifestation of Crohn's disease of small intestine is:-
    - (A) Ankylosing Spondylitis
    - (B) Erythema Nodosum
    - (C) Iritis
    - (D) Ureteral Obstruction



- 90. Which of the following is not true about Pneumatosis intestinalis of small intestine?
  - (A) It is seen equally and males and females
  - (B) Most common location is subserosa in the jejumum
  - (C) Operative Producedures are required in most of the cases
  - (D) It is associated with COPD and immunodeficiency states
- 91. Regarding IBD which is FALSE:-
  - (A) Erythema nodosum tens to correlate well the activity of the underlying bowel disease
  - (B) UC commonly involves the colon but not the anus
  - (C) Smoking worsens Crohn's disease
  - (D) Nephrolithiasis occurs more commonly with UC
- 92. Which of the following is TRUE regarding Boerhaave's syndrome?
  - (A) Diagnosis and surgery within 48 hours has a survival rate of greater than 50%
  - (B) Barium oesophagram is an appropriate investigation
  - (C) Haematemesis is unusual
  - (D) 90% of erect chest x-rays are initially normal
- 93. What is not true about malrotation of the intestine?
  - (A) In Incomplete rotation the rotation is arrested at 180 degree
  - (B) The small intestine lies on the right with caecum in the midline
  - (C) Ladd's band extends from the Right upper quadrant to the caecum
  - (D) Hyperrotation is the most common form of intestinal malrotation



- \$77
- 94. What is not true about the immune mechanism in the small intestine?
  - (A) Intestine contains more than 70% of IgA producing cells in the body
  - (B) IgA acts by activating the complement pathway
  - (C) IgA is produced by plasma cells in the lamina propria
  - (D) Approximately 60% of the lymphoid cells are T cells
- 95. False statement regarding endoscopic management of varices:-
  - (A) All patients with cirrhosis should undergo screening endoscopy
  - (B) If no varices are found endoscopy should be done every 2-3 years
  - (C) Small varices on endoscopy warrant endoscopy every 2-3 years
  - (D) Varices with red colour sign should undergo EVL
- 96. Which is not true regarding physiology of portal hypertension?
  - (A) Both the portal blood flow as well as portal resistance increases
  - (B) There is extensive hyperdynamic circulation
  - (C) Blood flow towards the portal vein increases because the systemic venous pressure increase
  - (D) Splanchnic vasodilatation is caused by relaxation of splanchnic arterioles and splanchnic hyperemia
- 97. Statistical tool used to counteract problem of multiple comparisons is called:-
  - (A) Kruskal wallis
  - (B) Bonferroni
  - (C) Cochrane
  - (D) T test



- 98. Poor prognosis of pancreatic cancer is suggested by all EXCEPT:
  - (A) Tumor size > 2 cm
  - (B) > 2 units of blood transfusion during surgery
  - (C) Aneuploidy in tumor
  - (D) Location in head region
- 99. Patient with minimal hepatic encephalopathy treated with lactulose for 3 months. All of the following are true EXCEPT:—
  - (A) Arterial ammonia decreases
  - (B) Decrease in serum endotoxin levels
  - (C) Increase in myoinositol on magnetic resonance spectroscopy
  - (D) Decrease in choline on magnetic resonance spectroscopy
- 100. Boundaries of gastrinoma triangle are all EXCEPT:-
  - (A) Cystic duct & CBD junction
  - (B) Gall bladder & cystic duct junction
  - (C) Junction of Neck of pancreas & Head of Pancreas
  - (D) 2<sup>nd</sup> and 3<sup>rd</sup> part of duodenum
- 101. Sweat chloride levels are increased in all EXCEPT:-
  - (A) Cystic fibrosis
  - (B) Hyperparathyroidism
  - (C) Hypothyroidim
  - (D) Malnutrititon



| STO  |      |   |
|------|------|---|
| 102. | Bile | stained eggs are seen in:-  |
|      | (A)  | Taenia Solium   |
|      | (B)  | Taenia Saginata   |
|      | (C)  | H.nana  |
|      | (D)  | Ascaris   |
| 103. | Inta | epithelial lymphocytes in small intestine, all are true EXCEPT :- |
|      | (A)  | >98% are T cell   |
|      | (B)  | Mostly are CD8+   |
|      | (C)  | Majority express γδ TCR   |
|      | (D)  | Majority express αβ TCR   |
| 104. | All  | of the following are tumor suppressor genes EXCEPT:-              |
|      | (A)  | E-cadherin  |
|      | (B)  | B-catenin   |
|      | (C)  | APC   |
|      | (D)  | LKB1  |
| 105. | All  | of the following are part of lean body mass except:-              |

- (A) Extracellular lean mass
- (B) Fat mass
- (C) Visceral mass
- (D) Muscle mass



| 106. |      | rgic eosinophilic esophagitis in children manifests more with all of the following CEPT:— |
|------|------|---|
|      | (A)  | Vomiting  |
|      | (B)  | Ittitability  |
|      | (C)  | Dysphagia   |
|      | (D)  | Early satiety   |
| 107. | Mos  | t common inborn error of glycogen metabolism is:-   |
|      | (A)  | GSD type I  |
|      | (B)  | GSD type III  |
|      | (C)  | GSD type IV   |
|      | (D)  | GSD VI  |
| 108. |      | ch of the following hepatobiliary disease is not specific for cystic sis?                 |
|      | (A)  | Focal biliary cirrhosis with inspissation   |
|      | (B)  | Microgallbladder  |
|      | (C)  | Fatty liver   |
|      | (D)  | Mucocele  |
| 109. | Whic | ch drug is implicated in drug induced granulomatous hepatitis?                            |
|      | (A)  | Pheylbutazone   |
|      | (B)  | Nitrofurantion  |
|      | (C)  | Isoniazid   |
|      | (D)  | Dantrolene  |
|      |      |   |





| ST   |      |  |
|------|------|--|
| 110. | Vibr | io cholera produce all of the following toxins EXCEPT:-  |
|      | (A)  | Enterotoxin  |
|      | (B)  | Zona occludens toxin   |
|      | (C)  | Channel like protein   |
|      | (D)  | Zona adherens toxin  |
| 111. | Whi  | ch of following is not a cause of short bowel syndrome in adults?                                |
|      | (A)  | Chronic intestinal pseudoobstruction   |
|      | (B)  | Midgut volvulus  |
|      | (C)  | Jejunal atresia  |
|      | (D)  | Radiation enteritis  |
| 112. |      | arding SRUS (Solitary rectal ulcer syndrome) which of the following is ect:-                     |
|      | (A)  | They are always single   |
|      | (B)  | Always seen in rectum  |
|      | (C)  | Presence of smooth muscle fiber in mucosa is hallmark of diagnosis                               |
|      | (D)  | Endorectal ultrasound not useful is distinguishing it form invasive malignancy                   |
| 113. |      | ivity of rectal barostat is 95% in differentiating IBS form normal subjects alloon pressure of:- |
|      | (1)  | 20 mmHz  |

- (A) 20 mmHg
- (B) 40 mmHg
- (C) 35 mmHg
- (D) 50 mmHg



- 114. Regarding gastroduodenal motility in patients with diabetes mellitus which of the following is NOT correct:—
  - (A) Development of fasting like migrating motor complex in small intesting
  - (B) Irregular contractility
  - (C) Paucity of antral contractions
  - (D) Tonic contractions at pylorus
- 115. Risk factors for small intestinal tumors include all of the following EXCEPT:-
  - (A) Celiac disease
  - (B) Crohn's disease
  - (C) Ulcerative colitis
  - (D) Peutz-jeghers syndrome
- 116. Which of the following is not a Non-neoplastic mucosal polyp:-
  - (A) Hyperlplastic polyp
  - (B) Colitis cystic profunda
  - (C) Peutz-jegjers polyp
  - (D) Inflammatory polp
- 117. Bethesda guidelines for testing colorectal tumors for microsatellite instability include all of the following EXCEPT:—
  - (A) Person with cancer in families
  - (B) Person with two HNPCC related cancers
  - (C) Person with colorectal cancer diagnosed after age of 45 years
  - (D) Person with colorectal adenomas diagnosed before age of 40 years





- 118. Risk factors for colorectal cancer include all of the following EXCEPT:-
  - (A) Age >50 years
  - (B) High fat diet
  - (C) Low fiber diet
  - (D) Alcohol consumption
- 119. False positive slide guaiac test for fecal occult blood is seen in all of the following EXCEPT:-
  - (A) Exogenous peroxidase activity
  - (B) Vitamin C ingestion
  - (C) Red meat
  - (D) Storage of slides for prolonged period
- 120. Successful spontaneous closure of gastrointestinal fistula is unlikely if:-
  - (A) Output <500 ml/day
  - (B) Age <40 years
  - (C) Distal small bowel location
  - (D) Long fistulous tract

Space for Rough Work