

code 7. 14152  
Department of Pathology

Azra Naheed Medical College

TEST LIVER PANCREAS, GALL BLADDER

Time 60 min

1. A 35 year old male patient presents with malaise, fever and jaundice. His serological tests are positive for HBsAg.
- What are the potential outcomes of the disease. 1
  - What do you know about the structure of Hepatitis B virus. 1
  - Explain the serum markers with reference to the time interval of their appearance and what is window period. 2+1
2. A 40 years old male HCV positive patient is advised to undergo liver biopsy by his physician.
- What morphological changes would you expect in the biopsy due to chronic hepatitis. 2
  - Draw a graphical representation of the serum markers of hepatitis C virus showing progression to chronic infection. 3
3. A 50 years old patient with history of drinking alcohol for the past many years presents with malaise, anorexia, weight loss, upper abdominal discomfort and tender hepatomegaly.
- What are the three distinct patterns of liver injury expected in a chronic alcoholic. 2
  - What are the morphologic features of alcoholic steatohepatitis. 2
  - What is NASH 1
4. A 40 year old male, diagnosed case of Hepatitis C, presented to medical OPD with H/O malaise, fatigue, wt. loss. and hematemesis. On examination the liver is found to be enlarged. CT scan shows a mass in the left lobe of liver. Lab examination reveals raised levels of  $\alpha$ -fetoprotein.
- What is the diagnosis? 1
  - What are the precursor lesions of hepatocellular Carcinoma and its types? 3
  - What is the name of the most common malignant neoplasm of liver arising in early childhood. 1
5. A 55 yr old female presents to the surgical OPD with H/O colicky pain in the right hypochondrium. Ultrasonography reveals stones in the gallbladder. The stones were removed via laproscopic surgery and sent to the lab for analysis. Lab examination showed the stones to be composed of cholesterol and calcium carbonate.
- Enumerate 4 defects in cholesterol metabolism which lead to the formation of such stones. 2.5
  - What are the risk factors for the development of cholesterol stones 2
  - What are Rokitansky- Aschoff sinuses? 0.5
6. A 60 years old patient with a history of cigarette smoking presents with weightloss, anorexia, features of obstructive jaundice as well as migratory thrombophlebitis (Trousseau sign) is also seen. Histologically glandular structures with pleomorphic cuboidal to columnar epithelium and a fibrotic stroma is seen.
- What is the diagnosis? 1
  - Discuss the pathogenesis with respect to the genetic mutations and the role of Pancreatic intraepithelial neoplasia. 2
  - Give morphology of chronic pancreatitis with two risk factors. 2