



**All India Institute of Medical Sciences, Kalyani**  
**Second Professional MBBS Examination (Batch-2020-21)**

**Time: 3 Hrs.**

**Pathology (Paper-II)**

**Marks: 100**

- Answer all questions.
- Answer the questions in the same serial order strictly.
- Illustrate your answers with well labelled diagram wherever necessary.
- Answer each section in a separate answer book.

**Section A (Systemic Pathology)**

**Long answer question:**

**[2+3+2+3=10]**

1. A 32-year-old male patient presented with history of abdominal pain and blood-mixed stool, 4-6 times a day. He gave history of 10-kg weight loss from the time of onset of symptoms. Chest X-ray examination was normal with no lymphadenopathy. On sigmoidoscopic examination, superficial ulceration, with multiple small polypoidal structures, was noted in the rectum and sigmoid colon. The involvement was continuous without intervening normal area.
  - a. What is the most probable clinical diagnosis? Justify
  - b. Write a brief note on the pathogenesis of inflammatory bowel disease
  - c. What are the differences between intestinal ulcerative colitis and Crohn's disease?
  - d. Mention and write briefly the pathways of colorectal carcinoma development.

**Write Short notes on:**

**[8X5=40]**

2. Which one is the key microscopic feature of rheumatic heart disease? Describe different types of vegetations in endocarditis. (1+4)
3. Write a brief diagrammatic note on the cellular interactions in blood vessels during the formation of atherosclerosis. (5)
4. Describe various anatomical types of lung emphysema? What is the Reid index and how does that help a pathologist in pathological interpretation? (3+2)
5. Write down the basic anatomical and pathological differences between *H pylori* gastritis and autoimmune gastritis. (2+3)
6. Define cirrhosis. Enumerate the clinical and histopathological features of cirrhosis. (2+3)
7. Write a short note on the etiopathogenesis of non-alcoholic fatty liver disease (5)
8. Classify tumors of the gall bladder. What is the prognosis in patients with gall bladder carcinoma? (3+2)
9. How is Hodgkin lymphoma classified? Name, describe and draw the cell which is hallmark of Hodgkin Lymphoma. (3+2)

## Section B (Systemic Pathology)

**Long answer question:**

**[1+2+3+4=10]**

1. A-60-year-old obese male patient presented with polyuria, polyphagia and polydipsia.
  - a. What is your provisional diagnosis?
  - b. What are the diagnostic criteria of the disease?
  - c. How will you proceed for lab diagnosis of the case?
  - d. What are the acute and chronic complications of the disease?

**Write Short notes on:**

**[8X5=40]**

2. Write down the differences between nephrotic syndrome and nephritic syndrome. Dysmorphic RBC in urine is a finding of which kidney disease? (4+1)
3. Write a basic pathological description of Clear cell renal cell carcinoma. Name the gene which is most commonly implicated. (4+1)
4. Cervical screening is done using Papanicolaou stain on cervical scrape smears. Which changes are indicated of a cervical intra-epithelial lesion? Which organism is responsible for such change? Women of which age group is screened for such changes and what are the implications? (1+2+2)
5. Write down common causes of obstructive jaundice. Based on which biochemical parameters and pathology findings are the causes of obstructive jaundice and jaundice due to hepatocyte dysfunction, differentiated? (3+2)
6. What is the molecular basis of endometrioid endometrial carcinoma? (5)
7. Mention the site of involvement and classical pathological findings of conventional osteosarcoma. (1+4)
8. Write a short note on Hydatidiform mole. Mention its types and karyotypes of different types. (5)
9. Enumerate the common etiological factors for the occurrence of breast carcinoma. Describe the important prognostic parameters of carcinoma breast. (2+3)