

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**SECOND MBBS DEGREE EXAMINATION – APRIL 2024**

**SUBJECT: PATHOLOGY – PAPER I (ESSAY)**

(OLD REGULATION - 2018-19 & PRIOR BATCH)

Monday, April 15, 2024

Time: 10:20 – 13:00 Hrs.

Maximum Marks: 80

✍ Answer ALL the questions.

✍ Illustrate your answers with diagrams wherever necessary.

✍ Long Questions:

1. In a tabular form, compare the various characteristics of benign and malignant tumours.

Add a note on pathways of the spread of tumors.

(7+3=10 marks)

2. A 6-year-old child presented to Paediatric OPD with one week history of fever, fatigue and bone pains. On examination, his cervical and axillary lymph nodes were significantly enlarged. Laboratory investigations revealed a Total WBC count of 1,19,000/mm<sup>3</sup> and platelet count of 15,000/ mm<sup>3</sup>.

2A) What is your diagnosis?

2B) What are the investigations to confirm your diagnosis?

2C) Describe the peripheral smear findings in this condition?

(2+2+6 = 10 marks)

3. Write short notes on:

(4 marks × 15 = 60 marks)

3A. Mention the pathways of apoptosis. Describe any one pathway with the help of a suitable diagram.

3B. Compare acute and chronic inflammation in a tabular format.

3C. Describe the process of wound healing by first intention with the help of a diagram.

3D. Classify amyloidosis based on clinicopathological features.

3E. Discuss the genetic abnormality & clinical features in Turner syndrome

3F. Complication of transfusion reaction. Write briefly about TRALI.

(2+2 =4 marks)

3G. Describe the morphology of spleen in Amyloidosis

3H. Discuss the pathogenesis of septic shock

3I. Describe the morphological changes of diabetic nephropathy

3J. List any four tumour markers and explain their utility in clinical practice

3K. Discuss the types of Coombs test

- 3L. Differentiate between Ghon focus and Ghon complex and illustrate the microscopic features of a granuloma
- 3M. Discuss the investigations in the diagnosis of Hemophilia A
- 3N. Discuss the etiopathogenesis of Disseminated intravascular coagulation.
- 3O. In a tabular format discuss the difference between dystrophic versus metastatic calcification with examples.



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**SUBJECT: PATHOLOGY - PAPER II (ESSAY)**  
(OLD REGULATION - 2018-19 & PRIOR BATCH)

Wednesday, April 17, 2024

Time: 10:20 – 13:00 Hrs.

Maximum Marks: 80

✍ **Answer ALL the questions.**

✍ **Illustrate your answers with diagrams, flow charts, tables etc. wherever required**

1. Classify Premalignant Squamous Lesions of Cervix. Describe the morphology of Cervical carcinoma. Add a note on Cervical cancer screening and prevention.

(4+4+2 = 10 marks)

2. A 50 year old male, chronic alcoholic, came to the emergency with the complaints of blood in the vomitus and abdominal distension. On examination ascites was noted. Abdominal ultrasound showed shrunken liver with multiple echogenic texture. Liver function tests showed raised Alkaline phosphatase and Gamma glutamyl transpeptidase

2A. What is your diagnosis?

2B. Describe the Biochemical investigations that will help confirm your diagnosis

2C. Describe the morphology of the target organ and the likely complications in this patient

(1+2+(5+2) = 10 marks)

3. **Write short notes on:**

3A. Tabulate the microscopic differences between Crohn disease and Ulcerative colitis

3B. Types of Emphysema with pathogenesis

3C. Morphology of Osteoclastoma

3D. WHO classification of Ovarian neoplasms

3E. Giant cell arteritis

3F. Morphology of atherosclerotic plaque

3G. Define Nephrotic syndrome and list the causes

3H. Morphology of Meningioma

3I. Morphology of Papillary carcinoma thyroid

3J. Differences between complete and partial mole

3K. Morphology of Fibroadenoma

3L. Pathogenesis of acute pancreatitis

3M. Complications of myocardial infarction

3N. Morphology of Neuroblastoma

3O. Benign nephrosclerosis of kidney

(4 marks × 15 = 60 marks)

