

MANIPAL ACADEMY OF HIGHER EDUCATION**SECOND MBBS DEGREE EXAMINATION – MAY 2019****SUBJECT: PATHOLOGY – PAPER I (ESSAY)**

Tuesday, May 07, 2019

Time: 10:20 – 13:00 Hrs.

Maximum Marks: 80

- ✍ **Answer ALL the questions.**
✍ **Illustrate your answers with diagrams wherever necessary.**

1. Define anaemia. List the causes of megaloblastic anaemia. Discuss the pathogenesis of anaemia in Vitamin B12 deficiency and the laboratory findings that help in the confirmation of diagnosis.

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

2. A 60-year-old man was diagnosed to have diffuse infiltrating adenocarcinoma of the stomach on gastroscopic biopsy. On examination he had enlarged liver with multiple umbilicated nodules. He also had an enlarged left supraclavicular lymph node. Describe the likely histopathological features in the liver and lymph node. Define the phenomenon responsible for the same. Discuss the cascade of events that occur in this phenomenon.

(2+2+6 = 10 marks)

3. **Write short notes on:**

- 3A. Dystrophic calcification
3B. Arachidonic acid metabolites in inflammation and their action with flow chart
3C. Discuss interaction between endothelial and leukocyte adhesion molecules
3D. Define granuloma. Enumerate the types with examples
3E. Describe thromboembolism types with examples
3F. Describe pathways leading to systemic oedema
3G. Discuss pathogenesis of lysosomal storage disorder. List two examples with fundamental defects
3H. Peripheral blood smear finding in chronic myeloid leukaemia
3I. Pathogenesis of vaso-occlusive crisis in sickle cell anaemia
3J. Diagnosis and clinical features of haemophilia A
3K. Turner syndrome
3L. Major and minor cross matching of blood and their importance
3M. Radiation in carcinogenesis
3N. Human immunodeficiency virus and CD4+T cells
3O. Pathogenesis of Type-1 diabetes mellitus

(4 marks × 15 = 60 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
SECOND MBBS DEGREE EXAMINATION – MAY 2019
SUBJECT: PATHOLOGY - PAPER II (ESSAY)

Wednesday, May 08, 2019

Time: 10:20 – 13:00 Hrs.

Maximum Marks: 80

✍ All questions are compulsory.

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

1. Describe the sequence of events in the process of healing of a fracture. Discuss the causes for delayed union.

(6+4 = 10 marks)

2. A 48 year old lady para 5 presented with complaints of white discharge per vagina and post coital bleeding. On examination abdomen normal. Per speculum examination showed irregular cervix. Pap smear showed cells with high nucleocytoplasmic ratio, hyperchromatic pleomorphic nuclei and tadpole cells in a necrotic background.

2A. What is your diagnosis?

2B. Discuss the pathogenesis of this disease.

2C. Discuss the morphology of cervix in this disease.

(1+5+4 = 10 marks)

3. **Write short notes on:**

3A. Morphology of oligodendroglioma

3B. Clinical features and morphology of basal cell carcinoma

3C. Morphology of kidney in acute proliferative glomerulonephritis

3D. Sequence of serologic markers for chronic hepatitis B viral infection

3E. Macroscopic features that help to differentiate ulcerative colitis and crohn disease

3F. Pathogenesis of cholesterol gall stones

3G. Pathogenesis of emphysema

3H. Complications of atherosclerotic plaque

3I. Light microscopic changes of a myocardial infarct in the first 3 days

3J. Morphology of seminoma

3K. Microscopic features of papillary carcinoma thyroid

3L. Morphology of complete hydatidiform mole

3M. Enumerate four major prognostic factors of breast carcinoma

3N. Morphology of cardiac changes in acute rheumatic fever

3O. Causes and types of renal calculi

(4 marks × 15 = 60 marks)

