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MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND MBBS DEGREE EXAMINATION – NOVEMBER/DECEMBER 2019 SUBJECT: PATHOLOGY – PAPER I (ESSAY)

Monday, November 25 2019

Time: 10:20 - 13:00 Hrs.

Maximum Marks: 80

- Answer ALL the questions.
- & Illustrate your answers with diagrams wherever necessary.
- 1. Define neoplasia. With the help of a well labeled diagram, discuss the steps of metastatic cascade of malignant tumors.

(2+8 = 10 marks)

- 2. A 40 year old labourer, a non smoker, presented to the medicine out patient department with low grade remitting fever and progressively increasing productive cough since one month. His chest X-ray revealed bilateral apical consolidation of the lungs.
- 2A. What is your diagnosis?
- 2B. Discuss the pathogenesis of the above condition.
- 2C. What are its complications?

(1+6+3 = 10 marks)

- 3. Write short notes on:
- 3A. Mechanism of T cell immunodeficiency in HIV infection
- 3B. Laboratory diagnosis of multiple myeloma
- 3C. Pathogenesis of sickle cell disease
- 3D. Mechanisms of angiogenesis
- 3E. Morphological types of infarcts
- 3F. Biological function of complement system
- 3G. Laboratory diagnosis of aplastic anemia
- 3H. Virchows triad
- 31. Mechanism of increased vascular permeability in inflammation
- 3J. Diagrammatic representation of pathophysiology of disseminated intravascular coagulation
- 3K. Morphologic features of chronic inflammation
- 3L. Molecular pathogenesis of chronic myeloid leukemia
- 3M. Klinefelter syndrome
- 3N. Von Willebrand disease
- 30. Glomerular lesions in diabetic nephropathy

 $(4 \text{ marks} \times 15 = 60 \text{ marks})$

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

Tuesday, November 26, 2019

Time: 10:20 - 13:00 Hrs.

Maximum Marks: 80

- & All questions are compulsory.
- Z Illustrate your answers with diagrams, flow charts, tables etc. wherever required.
- 1. List the etiological factors of peptic ulcer disease. Discuss its pathogenesis. List the complications of gastric ulcers.

(2+5+3 = 10 marks)

- 2. A 55-year-old male complained of severe chest pain radiating to the left jaw and arm. His serum showed an increase in MB fraction of creatine kinase and lactate dehydrogenase.
- 2A. What is your diagnosis?
- 2B. Describe the evolution of morphologic changes in the above condition.
- 2C. List six complications of the above condition.

(2+5+3 = 10 marks)

- 3. Write short notes on:
- 3A. Etiology of bronchiectasis
- 3B. Morphology of leiomyoma
- 3C. Morphology of pleomorphic adenoma
- 3D. Morphology of malignant melanoma
- 3E. Morphology of heart in infective endocarditis
- 3F. Radiologic and morphologic features of giant cell tumor
- 3G. Morphology of seminoma
- 3H. Pathogenesis of gallstones
- 31. Morphology of fibroadenoma
- 3J. Morphology of vesicular mole
- 3K. Morphology of classical renal cell carcinoma
- 3L. CSF findings of tubercular meningitis
- 3M. Pathogenesis of acute pyogenic osteomyelitis
- 3N. Etiopathogenesis of multinodular goiter
- 3O. Etiology, morphology and electron microscopy of minimal change disease

 $(4 \text{ marks} \times 15 = 60 \text{ marks})$