## MANIPAL UNIVERSITY

### SECOND MBBS DEGREE EXAMINATION - NOV/DEC 2013

# SUBJECT: PATHOLOGY – PAPER I (ESSAY) (NEW REGULATION)

Monday, November 25, 2013

Time: 10:20 - 13:00 Hrs.

Maximum Marks: 80

- Answer all the questions.
- Z Illustrate your answers with diagrams wherever necessary.
- 1. Define Apoptosis. Describe the mechanism of apoptosis. Enlist the differences between necrosis and apoptosis.

(2+4+4 = 10 marks)

- 2. A 55-year-old female presented with fever and easy fatiguability for two months. On examination, cutaneous petechiae and ecchymoses were seen all over the body, along with gum hypertrophy and bone pain. Her laboratory parameters were as follows: hemoglobin 6g%, total white cell count 1,54,000/mm³ and platelet count 22,000/mm³.
- 2A. What is the diagnosis? Why?
- 2B. Describe the peripheral smear and bone marrow findings in this condition.
- 2C. Mention the WHO classification for this condition.

(2+4+4 = 10 marks)

#### 3. Write short notes:

- 3A. Mention differences between dry and wet gangrene.
- 3B. Enumerate four important prostaglandins and their role in acute inflammation.
- 3C. List factors influencing and complications of cutaneous would healing.
- 3D. Briefly explain the antithrombotic properties of endothelium.
- 3E. Mechanism of immune complex mediated hypersensitivity.
- 3F. List the clinical manifestations and diseases associated with Down syndrome.
- 3G. Mechanism of T-cell immunodeficiency in HIV infection.
- 3H. Classify amyloidosis and list two special stains used in the detection of amyloid.
- 3I. Fate of a thrombus.
- 3J. Mechanism of human papilloma virus carcinogenesis.
- 3K. Progression of primary tuberculosis.
- 3L. Pathogenesis of complications of diabetes mellitus.
- 3M. Enlist and describe the microscopy of the subtypes of classical Hodgkin lymphoma.
- 3N. Stages of erythrocyte sedimentation rate and two conditions where it is elevated.
- 30. Peripheral smear and bone marrow findings in megaloblastic anemia.

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



Reg. No.		

## MANIPAL UNIVERSITY

### SECOND MBBS DEGREE EXAMINATION - NOV/DEC 2013

# SUBJECT: PATHOLOGY - PAPER II (ESSAY) (NEW REGULATION)

Tuesday, November 26, 2013

Time: 10:20 - 13:00 Hrs.

Maximum Marks: 80

- Answer all questions. Illustrate your answers with diagrams wherever necessary.
- 1. Describe etiopathogenesis and morphology of cervical squamous cell carcinoma. Mention the role of Pap smear in cervical cancer screening.

(4+4+2 = 10 marks)

- 2. A 40 year old male, habitual alcoholic, presented with gross ascitis, jaundice and hematemesis. Ultrasonography of the abdomen revealed shrunken liver and splenomegaly. Liver function tests showed elevated levels of serum AST, ALT, γ-glutamyl transpeptidase and serum bilirubin. The patient succumbed despite supportive treatment.
- 2A. Mention the diagnosis and define it.
- 2B. Discribe the etiopathogenesis and consequences of the condition.
- 2C. Mention the laboratory clue that points towards the etiology of the condition.
- 2D. Describe the morphology of liver on autopsy.

(2+4+1+3 = 10 marks)

### 3. Write short notes on:

- 3A. Classification of testicular tumors.
- 3B. Define bronchiectasis. Mention the etiological conditions associated with it.
- 3C. Morphology of gastric adenocarcinoma.
- 3D. Morphology of giant cell tumor of bone.
- 3E. Morphology of vegetations on the heart.
- 3F. Pathogenesis of gallstones.
- 3G. Tabulate the differences in CSF analysis findings of bacterial, viral and tubercular meningitis
- 3H. Basal cell carcinoma.
- 31. Laboratory diagnosis of squamous cell carcinoma of lung.
- 3J. Morphology of renal cell carcinoma.
- 3K. Krukenberg tumor.
- 3L. Morphology of papillary carcinoma of thyroid.
- 3M. Complicated atheromatous plaque and its consequences.
- 3N. Morphology of chronic pyelonephritis.
- 30. List eight complications of myocardial infarction.

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

