

[LG 116]

APRIL 2015

Sub. Code: 2013

**M.D. DEGREE EXAMINATION**

**BRANCH III – PATHOLOGY**

**PAPER IV – IMMUNOPATHOLOGY, HAEMATOLOGY, PRINCIPLES  
AND APPLICATIONS TO TECHNOLOGICAL ADVANCES  
IN LABORATORY SERVICES**

*Q.P. Code :202013*

**Time : Three Hours**

**Maximum : 100 Marks**

**I. Essay:**

**(2 x 10 = 20)**

1. Discuss in detail about quality control in the pathology laboratory.
2. Classify non neoplastic lesions of leukocytes. Discuss in detail the granulocytic non neoplastic lesions.

**II. Write Short Notes on:**

**(8 x 5 = 40)**

1. Idiopathic myelofibrosis.
2. Splenic marginal zone lymphoma.
3. Langerhan cell histiocytosis.
4. FNAC of soft tissue lesions.
5. Liquid based cytology.
6. Immunology of malaria.
7. Digital photography in histopathology.
8. Urinary sediments.

**III. Reasoning Out:**

**(4 x 5 = 20)**

1. 25 year old female presents with recent h/o allergic rhinitis, urticaria and infection with WBC count of  $50 \times 10^9$  cells/ cu mm. Usg abdomen shows no organomegaly
  - A. What is your diagnosis?
  - B. What are the associated conditions?
  - C. What are the other causes?

2. 70 year old male was found to have generalised lymphadenopathy and Leukocytosis - count  $70 \times 10^9$  cells /  $\text{mm}^3$ 
  - A. What is your diagnosis?
  - B. What is the immunophenotype of this condition?
  - C. What is the clinical course?
3. 45 year old female had menorrhagia, difficulty in swallowing and pitting nails. Her blood examination revealed anemia.
  - A. What is your diagnosis?
  - B. Enumerate the differential diagnosis?
  - C. What are the morphologic changes in the bone marrow?
  - D. What is the cause of dysphagia?
4. 30 year female presented with fever, anemia, thrombocytopenia, renal failure and neurological deficits
  - A. What is your diagnosis?
  - B. What is the pathogenesis of this condition?
  - C. What are the other tests done for confirmation?

**IV. Very Short Answers:**

**(10 x 2 = 20)**

1. Thrombopoietin.
2. Latest tests for malaria.
3. Test for microalbuminuria.
4. DD for normocytic anemias.
5. Transient erythroblastopenia of childhood.
6. Bombay blood group.
7. 5 q- syndrome.
8. Sickling test.
9. Mastocytosis.
10. Protein-C.

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