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: $(2 \times 10 = 20)$

- 1. Discuss current concepts in classification of Myelodysplastic syndrome with a note on cytogenetic abnormalities.
- 2. 50 year old male presented with jaundice. Discuss the investigations for diagnosis.

II. Write Short Notes on:

 $(8 \times 5 = 40)$

- 1. Thalassemia.
- 2. Sample rejection criteria.
- 3. Haemolytic uremic syndrome.
- 4. Cryoprecipitate.
- 5. Chronic lymphocytic leukemia.
- 6. External quality assurance.
- 7. Promyelocytic leukemia.
- 8. Bone marrow transplant.

III. Reasoning Out:

 $(4 \times 5 = 20)$

- 1. A 10 year old boy presented with osteolytic lesion in the skull, skin nodules. FNAC of the skin nodule showed plenty of eosinophils and histiocytes. What is the probable diagnosis? Discuss the classification and syndromes associated.
- 2. A 55 year old lady with complaints of low back pain, was found to have multiple osteolytic lesions, anaemia. Bone marrow aspiration was done. Serum electrophoresis was advised. What is the probable diagnosis? Discuss the diagnostic criteria and prognostic factors.

- 3. A 50 year old male presented with oral ulcers and bullous lesions in the face and scalp. Skin biopsy was done. It revealed suprabasal bulla. What is the probable diagnosis? What is the role of IF in the diagnosis of these lesions?
- 4. A 40 year old female presented with thyroid nodule and cervical lymph nodal enlargement. Serum calcitonin was raised. What is the finding in FNAC of the thyroid nodule?

IV. Very Short Answers:

 $(10 \times 2 = 20)$

- 1. Pure red cell aplasia.
- 2. Telescoped urinary sediment.
- 3. Pelger Huet anamoly.
- 4. CSF examination in meningitis.
- 5. Civatte bodies.
- 6. PT INR.
- 7. Infections identified by PAP smear.
- 8. Paroxysmal nocturnal haemoglobinuria.
- 9. Markers for anaplastic large cell lymphoma.
- 10. Von Willebrand factor.
