

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0522]

MAY 2022

Sub. Code: 2013

M.D. DEGREE EXAMINATION

BRANCH III – PATHOLOGY

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

Q.P. Code: 202013

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Write the WHO classification, molecular markers and recent advances of non Hodgkin's lymphoma.
2. Enumerate and classify causes of pancytopenia. Discuss pathogenesis and lab diagnosis.

II. Write Short Notes on:

(10 x 5 = 50)

1. Rh factor.
2. Problems in pediatric blood transfusion.
3. Protein C deficiency.
4. Hypersplenism.
5. Platelet function test.
6. Hemolytic uremic syndrome.
7. Von willebrand's disease.
8. Hemoglobin electrophoresis.
9. Glycosylated hemoglobin.
10. Cytology of medullary carcinoma thyroid.

(2)

III. Reasoning Out:

(4 x 5 = 20)

1. A 45 year old male treated with chloroamphenicol for enteric fever 3 weeks back presented with severe pallor, sterna tenderness, nasal bleeding and high fever.
 - a) What is your diagnosis?
 - b) Describe your expected peripheral smear and bone marrow findings in this case.
 - c) What other causes can give rise to similar peripheral smear findings?

2. A 5 year old boy presents with multiple petechial spots over skin and mucosa 7 days after an attack of febrile illness.
 - a) What is your provisional diagnosis?
 - b) Describe the peripheral smear and bone marrow findings.
 - c) Write the differential diagnosis.

3. A 50 year old male kidney transplant recipient on chronic immune suppressive therapy was admitted for anemia. He received packed RBC from his sister. 3 days later he developed low grade fever, skin bullae, diarrhea, abdominal cramps and mild jaundice.
 - a) What is your diagnosis?
 - b) Discuss the pathology.

4. A 43 year old male presents with recurrent episodes of dark smoky urine for the past 1 year. O/E: Mild pallor and hepatomegaly was seen.
 - a) What is the provisional diagnosis?
 - b) What are the other possibilities?
 - c) How can you confirm the diagnosis?

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