FINAL EXAM
JUNE 2018

NATIONAL BOARD OF EXAMINATIONS

HEMATOLOGY

PAPER-I

HEMAT/J/18/48/I

Time: 3 hours
Max. Marks:100

IMPORTANT INSTRUCTIONS

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

1. a) Briefly outline iron metabolism. 4+2+2+2
   b) Write about the role of hepcidin in iron absorption.
   c) Clinical presentation of hereditary hemochromatosis.
   d) Genetic basis of hereditary hemochromatosis

2. Red cell membrane disorders: 4+3+3
   a) Pathogenesis
   b) Diagnostic algorithm of investigations.
   c) Management of these disorders.

3. Automated blood cell counters: 4+3+3
   a) Describe the principle of the instruments.
   b) What are the advantages of automation?
   c) What are the difficulties encountered for accurate platelet counts?

4. Epstein Barr virus infection: 5+5
   a) Associated hematological conditions.
   b) How should monitoring and management be done in a patient with active clinical infection?

5. Hematologic clonal disorders: 5+5
   a) How can clonality be established?
   b) Describe conditions associated with benign proliferations of large granular lymphocytes.

6. Inherited bleeding disorders: 3+4+3
   a) Enumerate common clinical conditions encountered.
   b) Investigations to be carried out in such a patient.
   c) Which are the clinical conditions where the screening coagulogram is normal?

7. Polycythemia in a 30-year-old male: 5+5
   a) Describe the diagnostic approach.
   b) Which are the hematological conditions which need to be considered?

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8. Hydroxyurea therapy: 5+5
   a) Describe the haematological conditions where it is used.
   b) Mechanism of action in these situations.

9. Non transfusion dependent thalassemias: 5+5
   a) Which are the conditions included?
   b) How is iron overload managed in such patients?

10. HLA typing: 4+3+3
   a) Describe the importance of HLA typing.
   b) Which are the techniques being currently used?
   c) What are the strategies adopted to find a compatible match if no donor is available in the family?

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