

HEMATOLOGY

PAPER – II

HEMAT/J/17/48/II

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) Causes of eosinophilia. 2+4+4
b) Idiopathic hypereosinophilic syndrome: Diagnostic approach.
c) Management of idiopathic hypereosinophilic syndrome.
2. a) What are regulatory T cells? 3+3+4
b) How are they detected in blood?
c) Role of regulatory T cells in GVHD.
3. a) Transfusion related acute lung injury (TRALI): diagnosis and management. (3+3)+4
b) Therapeutic plasmapheresis.
4. Stem cells: 2+4+4
a) What is the difference between mesenchymal and hematopoietic stem cells?
b) Therapeutic applications of mesenchymal stem cells
c) Mobilization of hematopoietic stem cells from bone marrow into the peripheral blood
5. Waldenström's macroglobinemia : 2+3+5
a) What are presenting symptoms and signs?
b) How is it diagnosed?
c) Management strategies.
6. a) What is dysmyelopoiesis? 3+4+3
b) Idiopathic cytopenia of undetermined significance (ICUS).
c) Clonal hematopoiesis of indeterminate potential (CHIP).

P.T.O.

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7. a) What are Natural Killer Cells? 2+2+4+2
b) Role of NK cells in GVHD.
c) What is NK cell leukemia? How is it diagnosed?
d) What are KIR and their implications in haploidentical HSCT?
8. Chronic myelomonocytic leukemia: 2+3+5
a) How does the patient present?
b) How is this diagnosed?
c) How is this managed?
9. Transfusion of blood/blood products: 3+3+4
a) What are the adverse effects of platelet transfusions?
b) Leucoreduction of blood products: Strategies and their efficacy.
c) Granulocyte transfusions
10. Transfusion induced iron overload: 4+2+4
a) How is it diagnosed and assessed?
b) What factors govern it?
c) How it is managed?
