FINAL EXAM
DECEMBER 2019

NATIONAL BOARD OF EXAMINATIONS

HEMATOLOGY

PAPER-III

Time: 3 hours
Max. Marks:100

HEMAT/D/19/48/III

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. Myelofibrosis: 3+4+3
   a) Enumerate the different prognostic scores.
   b) Mechanism of action of JAK 2 inhibitors and trials in pipeline.
   c) Results of allogeneic stem cell transplant.

2. A 35-year-old pregnant woman with 20th week gestation admitted with the diagnosis of Acute promyelocytic Leukemia. 3+4+3
   a) Risk stratification before treatment.
   b) Approaches of treatment.
   c) Follow up strategy of this patient.

3. Adolescents and young adult acute lymphoblastic leukemia (ALL): 3+4+3
   a) Difference of genetics from children with ALL.
   b) How to treat adolescents and young adult with ALL?
   c) Mention long term complications of survivors.

4. Follicular lymphoma: 3+4+3
   a) What are the different prognostic scores available?
   b) Results of different monoclonal antibody.
   c) Newer treatment options.

5. Hairy cell leukemia: 3+3+4
   a) Immunohistochemistry (IHC) and Immune phenotype approaches for diagnosis (IPT).
   b) Molecular genetics of hairy cell leukemia.
   c) Treatment approach of hairy cell leukemia.

6. Large cell Lymphoma: 3+4+3
   a) Enumerate the Hen's Algorithm.
   b) Double Hit Lymphoma treatment options.
   c) Prognosis of Double hit Lymphoma.

P.T.O.

HEMATOLOGY

PAPER-III

7. Immune thrombocytopenia (ITP): 3+3+4
   a) Pathogenesis.
   b) Difference between pediatric and adult ITP.
   c) What will be the best 2nd line treatment option in adult ITP (Evidence based)?

8. Hemophilia: 3+3+2+2
   a) Non-factor therapy of Hemophilia A.
   b) Psoas bleed – How to diagnose and treat?
   c) Low dose prophylaxis and its effectivity.
   d) Diagnosis of inhibitor.

9. a) Methods to detect minimal residual disease (MRD). 4+3+3
   b) Role of MRD in the treatment of myeloma.
   c) Role of MRD in the treatment of acute myeloid Leukemia.

10. a) Principle of CAR-T cell therapy. 3+3+4
    b) Different Generations of CAR-T cell.
    c) Application of CART cell therapy in Hematology.

****