Write short notes on:

1. a) Revised WHO 2016 Classification for chronic myeloproliferative disorders. 
   b) Iron resistant iron deficiency anemia.

2. a) Minimal residual disease in acute leukemia. 
   b) Laboratory approach for diagnosis of thrombophilia.

3. a) Secondary autoimmune hemolytic anemia. 
   b) Molecular and genetic pathobiology of multiple myeloma.

4. a) Transfusion related acute lung injury. 
   b) JAK 2 mutations in hematological malignancies.

5. a) Hematological changes in dengue fever. 
   b) Principles of automated blood cell counters.

6. a) Algorithm to use of blood component therapy in bleeding disorders. 
   b) Approach to diagnosis of hemoglobinopathies.

7. a) Laboratory diagnosis of acquired inhibitors of coagulation. 
   b) Principles and uses of HPLC.

8. a) Bone marrow failure syndrome. 
   b) Role of bone marrow biopsy in diagnosis and staging of lymphomas.

9. a) Biochemical basis of megaloblastic anemia. 
   b) Medicolegal liabilities in laboratory medicine.

10. a) Peripheral blood stem cell transplantation. 
    b) Hematological manifestations of HIV infection.