Write short notes on:

1. a) Define and classify hemophagocytic syndrome, and approach to its lab diagnosis.
   b) Waldenstrom microglobulinemia.

2. a) Hematological changes in dengue fever.
   b) Etiology and diagnosis of Pure Red Cell Aplasia.

3. a) Infectious complications of blood transfusion.
   b) Value of reticulocyte preparation in diagnosis of anemia.

4. a) Morphology of primary myelofibrosis.
   b) Hypoplastic acute leukemia.

5. a) Pathophysiology of sickling
   b) Molecular basis of mixed lineage leukemia.

6. a) Lab diagnosis of macrocytic anaemias.
   b) Pathogenesis and lab diagnosis of hypereosinophilic syndrome.

7. a) Antiphospholipid syndrome.
   b) Hematological manifestations in HIV disease.

8. a) Diagnostic criteria of multiple myeloma.
   b) Hematological manifestations of SLE.

9. a) Secondary polycythemia.
   b) Prognostic markers of acute lymphoblastic leukemia.

     b) International Normalized Ratio (INR), its derivation and significance.