**Mid-Term Assignment**

**Course Title: hematology**

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**Section A**

1. the most commonly ordered blood tests
2. Hmglb
3. When a person has been diagnosed with a disease known to affect blood cells, a \_\_\_ will often be ordered on a regular basis to monitor their condition
4. Hmglb
5. The cells that are part of the body's defense system against infections and cancer and also play a role in allergies and inflammation
7. Lymphocytes

10. Normal RBC range in:Male:
11. 4.7 to 6.1 million cells p (cells/mcL)
12. Low platelet concentration is
13. Thrombocytopenia
15. Also known as myeloid tissue
16. Yellow BM
17. All red blood cells and platelets in humans adults are formed in\_\_\_\_\_\_\_\_\_\_\_\_
18. Myeloid tissue
19. Increase in red blood cells
20. Polycythemia
21. Thrombopoietin is a glycoprotein hormone produced mainly by\_\_\_
22. Both a and b
23. life span of RBCs is\_\_\_\_\_
24. None of them

**Section B**

**Q:1** Enlist characteristics of blood. Ans1; viscous than water 2;Made up of connective tissue 3;plasma 55 percent 4;formed elements 45 percent 5;7 percent of all body weight 6;5 liters 7;ph 7.4 8;metallic taste 9; colour bright red (oxygenated) dark (deoxygenated) 10; Temp 38 **Q:2** Briefly Explain hematopoiesis. Ans HEMATOPOIESIS; it is the processes of production of all types of blood cells including formation development and differentiation of blood cells . all cellular blood components are derived from hamatopoatic stem cells. In heldy person new blood cells of produce daily in order to maintain steady state level in body.the stem cells reside in the bone marrow and have the ability to give rise all the blood cell types and tissues

**Q:3** write down a comprehensive note on bone marrow. Ans. BONE MARROW;is the soft ,spongy tissues in side bones that makes blood forrming cells.IT Contain two types of stem cells mesenchymal and heamatopoetic a red bone marrow consist of blood forming stem cells. Yellow bone marrow contain mesenchymal stem cells.these produce fat cartilage and bone.

**Q:4** Describe different sites of hematopoiesis in fetus, infants and adults

ANS. Embryo; yolk sack then liver fetus; spleen, liver, bone marrow Infants; bone marrow ,active site decreases but retain ability of heamaptoises Adults; bone marrow of long bones.