

Class Code. _____

Name/Class Rollno: **Anwar Ul Haq** ID **16266**

Note:

- Attempt all questions from this section.
- Use Blue / Black Ink only. Do not use red color.
- Tick or encircle only one option in each given question.

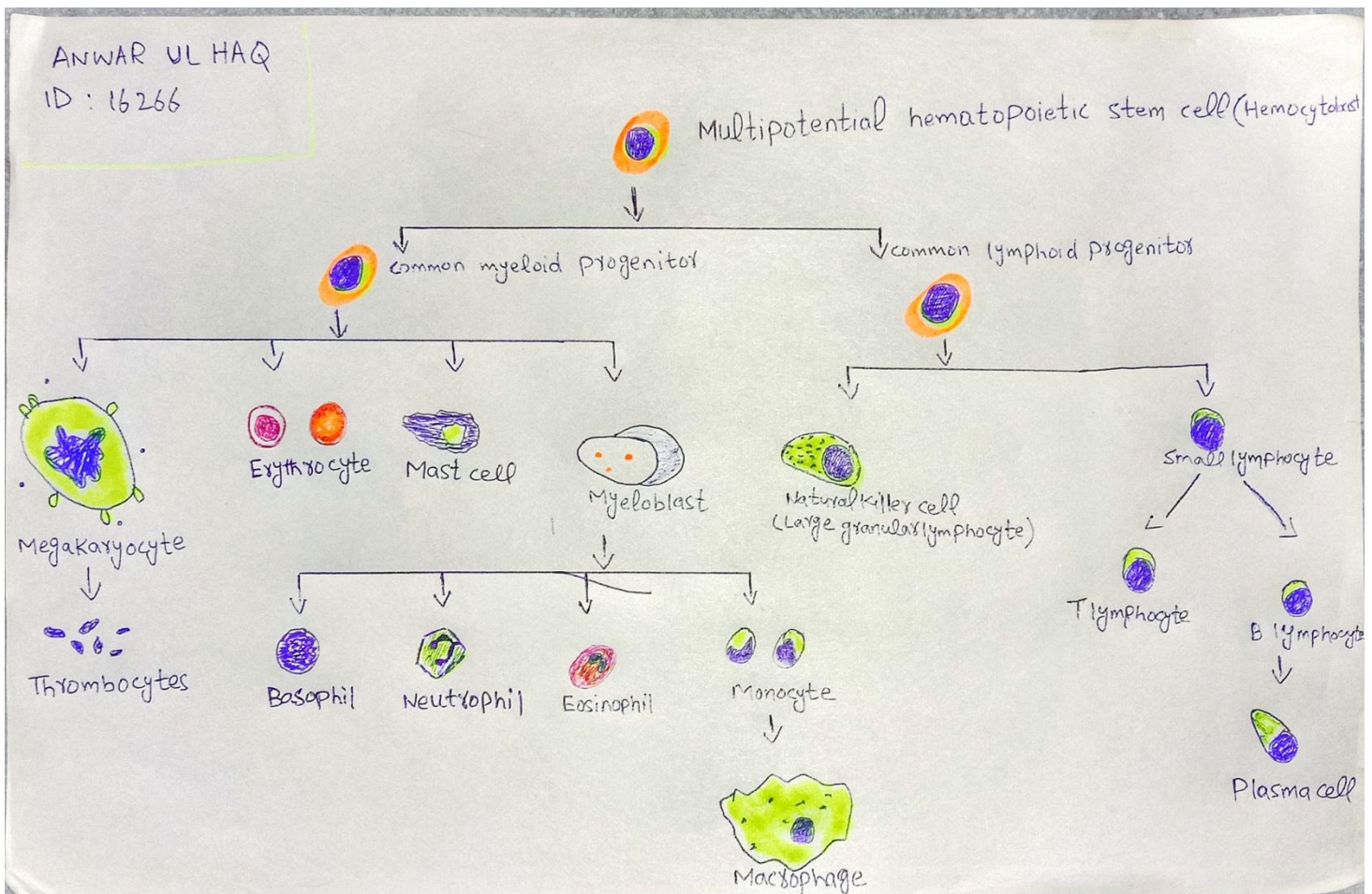
It's an open book Conceptual Assignment paper.

Time to Use your brain now.

Q 1 Briefly explain the process of hematopoietic along with diagrammatic illustration. (Marks 10)

Ans: Haemopoiesis is the formation of blood cellular components. All cellular blood components are derived from pluripotent hemopoietic stem cells which is present in the bone marrow.

. In a healthy adult person approximately 10^{11} 10^{12} new blood cells are produced daily in order to maintain steady-state levels in the peripheral circulation.



Q 2 What are the factors that influence the respiratory rate, explain in detail. (Marks 10)

Ans: The following factors on respiratory rate is given by

- 1, Temperature;** when the temperature increase in the respiratory rate also increases until the temperature gets too high enzyme to denature
- 2, The concentration of glucose;** when the concentration of glucose increase until the maximum level reached.
- 3, Concentration O₂;** when the oxygen increase the respiratory rate will be reached at the maximum level.
- 4, The concentration of CO₂;** when the concentration of CO₂ increases in our body the respiratory rate will be decrease and vice versa.
- 5, Physical factors;** Taking cough and exercise can be modifying so it will increase the rate of respiratory.
- 6, Volition or conscious control;** Signing swallowing, holding which is our breath for short time.
- 7, Involuntary;** involuntary controls take over and normal respiration begin again.
- 8, Age;** age can also affect the respiratory rate. When lung capacity is increasing lower respiratory rates are sufficient to exchange.
- 9, Exercise;** Exercise are also effecting respiratory rate the of exercise increases the respiratory rate also increases
- 10, Stress;** strong emotions will also increase the respiratory rate.

Q 3 Enlist different layers of skin; write a detailed note on epidermis. (Marks 10)

Ans: Different layers of skin:

The epidermis; the outermost layer of skin, provides a waterproof barrier and creates our skin tone.

The dermis; beneath the epidermis, contains tough connective tissue, hair follicles, and sweat glands.

The deeper subcutaneous tissue (hypodermis) is made of fat and connective tissue.

Epidermis; The upper or outer layer of the two main layers of cells that make up the skin. The epidermis is mostly made up of flat, scale-like cells called squamous cells. ... The deepest part of the epidermis also contains melanocytes. These cells produce melanin, which gives the skin its color

The epidermis is the outermost layer of our skin. Its main purpose is protection. ... The stratum spinosum, which helps bond skin cells together, and stratum granulosum, which produces a waxy material that aids in waterproofing the skin layers, are located between the stratum corneum and the stratum basale.D.

Q 4 Define lymphatic system, what are different components of lymphatic system? (Marks 10)

Ans: The lymphatic system is a network of tissues and organs that help rid the body of toxins, waste and other unwanted materials. The primary function of the lymphatic system is to transport lymph, a fluid containing infection-fighting white blood cells, throughout the body.

The lymphatic system; This system consists of the lymphatic vessels (capillary plexus, precollecting and collecting lymph vessels including lymphatic ampullae and diverticulum and lymphatic trunks and ducts), organs (lymph nodes, spleen, thymus and tonsils), tissue (Peyer's patch), etc

Q 5 what is blood pressure? How will you check and record blood pressure of a patient? (Marks 10)

Ans: Blood pressure; The pressure that is exerted on the vessels of blood that is called blood pressure .

OR

Blood pressure is the pressure of circulating blood which exerted a pressure on the walls of blood vessels that is called blood pressure.

Blood pressure usually refers to the pressure in large arteries of the systemic circulation.

Instrument: stethoscope which is used to measure the blood pressure.

Record blood pressure of a patient:

Rest the patient's arm on a surface that is level with their arm.

Place the stethoscope over the brachial artery (in the bend of the elbow) and listen to the pulse.

Pump up the cuff slowly and listen for when the pulse disappears. This is an indication to stop inflating the cuff.

stay home, stay safe