

Semester 2nd (Section B)

Date:17/04/2020

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Section A

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2. D
3. C
4. B
5. A
6. A
7. D
8. A
9. C
10. D

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Section B

Q No.1:

Characteristics of Blood

Ans: *Blood is a fluid that transport oxygen and nutrients to the cell.*

- *Blood carries away carbon dioxide from cell.*
- *Heart pump the blood to verious part of the body through pulmonary vein and deoxygenated from*

the body back to the heart.

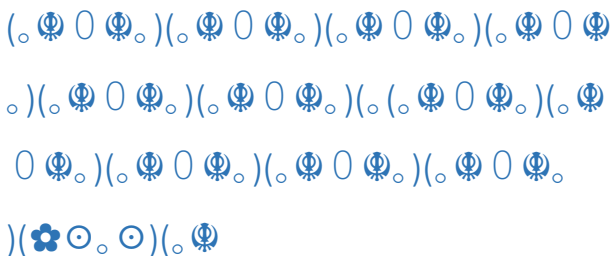
- *Blood is both a tissue and a fluid.*
- *Blood provide immunity to the body and protect the body from disease.*
- *Blood also have hemoglobin which give colour to the blood.*
- *Blood also produce antibodies against infection.*

Q No.2:

Hematopoiesis

➤ **Ans:**

Hematopoiesis is the process by which immature cell develop in to mature blood cell. Hematopoiesis is produce all those of blood cell and blood plasma. It occurs in the hematopoietic system which includes organs and tissues such as the bone marrow, liver, and spleen.



- Hematopoiesis begins the first week of embryonic development.
- *All type of blood cell and plasma develop from stem cell that can develop from any other cell.*
- Hematopoiesis depends on the body needs .the body continually manufacture new blood cell to replace old cell. About one percent of the body

blood cell must be replaced every day.

- The process of hematopoiesis begins with an unspecialized stem cell. This stem cell multiplies, and some of these new cells transform in to precursor cells.



Q No.3: Bone marrow

- **Ans:** *Bone marrow is a spongy*

like tissue found in the hollow portion of bone in the body.

- *All new blood cells are produced in the bone marrow. Bone marrow is the primary site of new blood cell.*
- *In adult humans bone marrow is primarily located in the ribs, vertebrae, sternum, and bones of the pelvis.*
- *Bone marrow comprises approximately 5 percent of total body mass in*

healthy adult human.

- *Bone marrow transplants can be conducted to treat severe diseases of the bone marrow, including certain form of cancer such as leukemia.*
- *In adult humans bone marrow is found in the pelvis, sternum, cranium, ribs, vertebrae and scapula, and variable found in the proximal end of the Long bones such*

Section B

Q:1 Enlist characteristics of blood.

Q:2 Briefly Explain hematopoiesis.

Q:3 write down a comprehensive note on bone marrow.

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