3 a. i. Name the four factors that affect photosynthesis (2)

ii. Draw a neat labelled structure of a chloroplast (3)

b. i. Write any three differences between Anaerobic respiration and aerobic respiration (3)

ii. Name the cell-organelle where complete breakdown of glucose occurs. (1)

iii. Name the natural process that helps in replenishing oxygen in nature. (1)

4. a. i. Draw a neve cell and label any 4 parts (3)

ii. Write any two characteristics of cardiac muscle (2)

b. i. Write any two differences between a bone and cartilage (2)

ii. Write any three differences between respiration and photosynthesis (3)

5. a. i. Name the two by-products of a germinating seed during respiration. (2)

ii. Name the biochemist who established the Kreb's cycle (1)

iii. Name the two criteria of sunlight required to increase the rate of photosynthesis (2)

b. i. How are fossil fuel important to us? (2)

ii. Write any two differences between xylem and phloem (2)

iii. What is tissue culture? (1)

6. a. i. Write any two differences between RBC and WBC (2)

ii. What is lymph and state its function (1)

iii. Write any three differences between striated and instriated muscles (3)

b. i. Write any three functions of blood (3)

ii. Name the two types of skeletal tissue. (1)

Half Yearly Examination - 2018-19

Biology

Class : VII

Time : 2 Hrs. + 15 min. **Full Marks : 80**

SECTION A (40 Marks)

(Attempt all questions from this Section)

I. a. Choose the most appropriate option and write : (5)

1. The process of obtaining food and utilising it for various metabolic activities is known as

a. assimilation b. nutrition c. digestion

d. photosynthesis

2. The minute openings present in the leaves are known as –

a. lenticels b. guard cells c. stomata

d. chlorophyll

3. The optimum temperature for photosynthesis is -

a. 20-30^{o}C b. 10-20^{o}C c. 30-40^{o}C d. 40-50^{o}C

4. Glucose is stored in plants in the form of -

a. protein b. starch c. glycogen d. fat

5. Tendons join –

a. muscles to bones b. bones to bones

c. muscles to skin d. muscles to muscles

b. Name the following : (10)

1. The muscles present in the heart are called

2. The long thread-like structures arising from the cyton of nerve cells are

3. The cells regulating the opening and closing of stomata
4. The immediate product of photosynthesis
5. The energy coin of the cell
6. The process of production of energy inside the cells
7. The number of ATPs released during aerobic respiration
8. Aerobic respiration takes place in the presence of
9. Energy is stored in the form of
10. A group of similar cells performing a specific function

c. Correct the following false statements : (8)

1. In meristimatic tissue, cells have thick walls
2. Sclereids are a type of collenchymatous tissue with highly thickened walls
3. Guard cells are horse-shoe-shaped cells that surround each stoma
4. When the colour of iodine solution turns blue-black it shows the presence of chlorophyll
5. All plants are termed as consumers
6. During the night, the stomata remains open
7. Cambium is responsible for the increase in length of the plants
8. WBC contain haemoglobin

d. Write the location and function of the following : (6)

1. Cartilage 2. Lenticels 3. Chloroplast

e. Match the following : (Rewrite in pairs only) (8)

1.	Cyton	grana
2.	Parenchyma	autotrophic nutrition
3.	Fossil fuel	spindle-shaped
4.	Cartilage	shock absorber
5.	Connective tissue	blood
6.	Chloroplast	petroleum
7.	Plants	aerenchyma
8.	Unstriated muscle	cell body

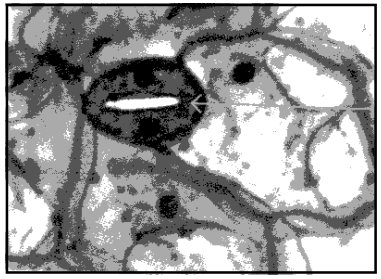
f. Define : (3)

1. photosynthesis 2. fermentation 3. respiration

SECTION B (40 Marks)

(Attempt any 4 questions)

2a



i. Identify the above diagram (1)

ii. Name the place where they are found (1)

iii. Write in brief its day and night working mechanism (2)

iv. Write its function (1)

b. i. Name the two types of respiration and represent each with a formula (chemical equation) (3)

ii. Write the full form of ATP (1)

iii. What is chlorophyll and what is its function? (1)