

**LITTLE FLOWER SCHOOL, RAPTINAGAR, GORAKHPUR
FIRST SEMESTER EXAMINATION 2020—2021**

Class—VII

Time: 2 Hours

Biology

Max Marks: 100

I. Fill in the blanks.

[10× 1= 10]

- 1) The _____ divides continuously to produce millions of cells.
- 2) The cells of meristematic tissues are small and_____.
- 3) _____ conducts water and minerals upwards.
- 4) _____ and _____ are a type of fluid connective tissue.
- 5) Voluntary muscles are also known as _____ muscles.
- 6) Oxygen escapes from the plant body through_____.
- 7) The process of respiration takes place both in _____ and_____.
- 8) The energy released during respiration is stored in the form of_____.
- 9) The gas released during photosynthesis is _____.
- 10) Plants that have white and green parts in the same leaf are called_____.

II. State true or false:-

[10×1=10]

- 1) Simple tissues are made up of many types of cells.
- 2) Sclerenchyma tissue consists of dead cells with no protoplasmic contents.
- 3) Ligaments connect muscles to bones.
- 4) RBCs of frog contain nuclei.
- 5) Neurons join together to form cyton.
- 6) Green plants respire anaerobically.
- 7) Growing parts of a plant respire actively.
- 8) In cactus, photosynthesis takes place in the stem.
- 9) Normally, stomata remain close during the day.
- 10) As the amount of carbon dioxide in the air increases, the rate of photosynthesis also increases.

III. Choose the correct option:-

[10×1=10]

- 1) A group of similar cells which perform a specific function are called---
 - a) Tissue
 - b) Organ.
 - b) Organ system
 - d) Organism
- 2) Vascular bundles are formed of---
 - a) Parenchyma and Collenchyma
 - b) Collenchyma and Sclerenchyma
 - c) Xylem and Phloem
 - d) Xylem and Sclerenchyma
- 3) Blood is a---
 - a) Connective tissue
 - b) Epithelial tissue
 - c) Supportive tissue
 - d) Nervous tissue
- 4) Nervous tissue is made up of specialised cells called---
 - a) Neurons
 - b) Cyton.
 - c) Axons
 - d) Dendrites
- 5) Which of these muscles constitute about 50% of the body weight?
 - a) Striated muscles
 - b) Unstriated muscles
 - c) Cardiac muscles
 - d) All of them together

- 6) Which part of the plant respire slowly?
 a) Vegetative buds
 b) Germinating seeds
 c) Tip of stem
 d) Adult organs
- 7) Extra glucose synthesized is stored as _____
 a) Insoluble starch
 b) Soluble starch
 c) Soluble sugar
 d) None of these
- 8) Photosynthesis is important because it _____
 a) Synthesizes food
 b) Purifies atmosphere
 c) Maintains a balance of
 d) All of these gases in the atmosphere.
- 9) The end products of aerobic respiration are—
 a) CO₂
 b) CO₂ + H₂O
 c) CO₂ + H₂O + energy
 d) CO₂ + energy
- 10) This is used to test the presence of starch in leaf-
 a) Iodine solution
 b) Copper sulphate solution
 c) Salt solution
 d) Mercury

IV. Match the following:-

[10×1=10]

	<u>Column a</u>		<u>Column b</u>
1	Collenchyma	(a)	Stomach
2	Lateral meristem	(b)	Petiole
3	Skeletal tissue	(c)	Tendon
4	Fibrous tissue	(d)	Bone
5	Involuntary muscles	(e)	Circumference
6	Index of life	(f)	Conduction
7	Variegated leaves	(g)	Stomata
8	Xylem	(h)	Croton
9	Guard cells	(I)	Lenticels
10	Mature stem	(j)	Respiration

V. Identify the error(s) in the given statements:-

[5×1=5]

- 1) Permanent tissue is made up of group of cells which divide continuously and very fast.
- 2) Protective tissue is also known as vascular tissue.
- 3) Lymph can also be called blood without white blood cells.
- 4) During photosynthesis, released carbon dioxide escapes through stomata.
- 5) More the intensity of light, slower is the rate of photosynthesis.

VI. Name the following:-

[5×1=5]

- 1) Plant tissue located at the base of nodes.
- 2) Minute spaces in which bone cells are present.
- 3) Cartilage cell.
- 4) The process by which food releases energy.
- 5) Organisms which respire in the absence of oxygen.

VII. Differentiate between the following.(Any 2)

[2×2=4]

- 1) Meristematic tissue and Permanent tissue
- 2) Bone and Cartilage
- 3) Aerobic respiration and Anaerobic respiration

- VIII. Give reasons for the following statements.(Any3) [3×2=6]**
- 1) Intercellular spaces are absent between the cells of collenchyma.
 - 2) Areolar tissue is the most widely distributed connective tissue in animals.
 - 3) Leaves are reduced to spines in desert plants like cacti.
 - 4) Photosynthesis purifies atmosphere.
- IX. Explain the following terms.(Any2) [2×3=6]**
- 1) Life processes
 - 2) Parenchyma
 - 3) Fibrous tissue
 - 4) ATP
- X. Answer in short. (Any 4) [4×3=12]**
- 1) Describe the structure and function of cardiac muscles.
 - 2) Why is blood known as the fluid connective tissue?
 - 3) How does photosynthesis occur in plants with red or brown leaves?
 - 4) Give the word equation for aerobic and anaerobic respiration.
 - 5) What is neuron?
- XI. Answer in detail. (Any 4) [4×4=16]**
- 1) Write a note on vascular system of plants.
 - 2) Describe in brief about the various types of tissues found in animals.
 - 3) Write a note on Nervous tissue.
 - 4) Describe the process of photosynthesis give its significance.
 - 5) How does respiration take place in plants?
 - 6) Describe any two factors that affect photosynthesis.
- XII. Draw a well labelled diagram (any one) [1X6=6]**
- 1) Structure of the stomata
 - 2) Types of muscular tissue