

PM SHRI KENDRIYA VIDYALAYA SITAPUR FIRST SHIFT
PERIODIC TEST -2

Subject: Biology

Time: 1:30 Hr.

Class: XI

Max. Marks: 40

Note:

Section A- Question no. 1-8 is of 01 mark each

Section B- Questions no. 9-12 is of 02 marks each

Section C- Question no. 13 & 14 are of 03 marks

Section D- - Question no. 15 & 16 are case based questions carrying 04.

Section E- Question number 17 & 18 are of 5 marks.

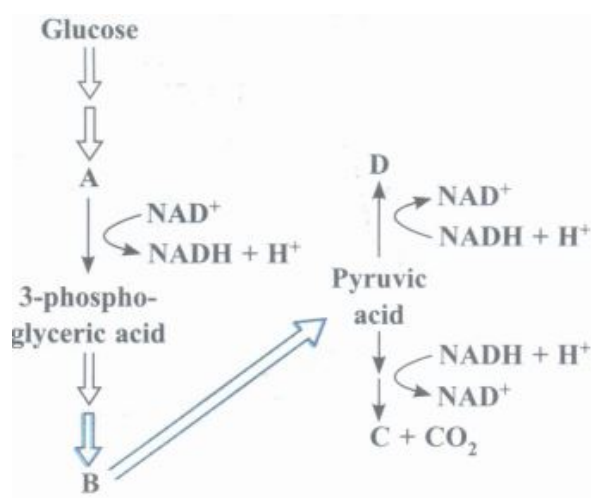
SN	Question	Marks
Section A		
1	Where does the process of glycolysis take place in plant cells? A) Mitochondria B) Nucleus C) Cytoplasm D) Chloroplast	1
2	The end product of anaerobic respiration in yeast is: A) Lactic acid B) Alcohol and carbon dioxide C) Acetyl CoA D) Glucose	1
3	Which of the following hormones is responsible for the elongation of cells and phototropism? A) Auxin B) Cytokinin C) Gibberellin D) Ethylene	1
4	The process of flowering in response to changes in day length is called: A) Photoperiodism B) Vernalization C) Germination D) Phototropism	1
5	The breathing rate in humans is controlled by the: A) Medulla oblongata B) Cerebellum C) Pituitary gland D) Cerebrum	1

6	Which of the following is a consequence of the oxygen dissociation curve shifting to the right? A) Increased affinity of hemoglobin for oxygen B) Decreased affinity of hemoglobin for oxygen C) No change in hemoglobin's affinity for oxygen D) Hemoglobin does not bind to oxygen	1
Question No. 7 & 8 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below: a) Both A and R are true and R is the correct explanation of A. b) Both A and R are true and R is not the correct explanation of A. c) A is true but R is false. d) A is false but R is true.		
7	Assertion: The process of respiration in plants occurs both in the presence and absence of oxygen. Reason: Plants perform aerobic respiration when oxygen is available and switch to anaerobic respiration when oxygen is not available.	1
8	Assertion: During expiration, the diaphragm relaxes and moves upward. Reason: This upward movement of the diaphragm increases the volume of the thoracic cavity and helps expel air from the lungs.	1
Section- B		
9	What is the final product of anaerobic respiration in plants? What is the role of oxygen in aerobic respiration?	2
10	What causes the movement of air in and out of the lungs? What is the significance of the partial pressure of oxygen in the lungs?	2
11	Which plant hormone is responsible for breaking seed dormancy? How does it affect plant growth? Site one example.	2
12	What is the net energy gained after glycolysis? What is the fate of pyruvate in the absence of oxygen during glycolysis? OR What is Respiratory Quotient ? What are the values of RQ for Fat and Protein?	2
Section C		
13	A diagram of a section of an alveolus with a pulmonary capillary is given below. Answer the questions that follow: Exchange between Alveolus and Capillaries (a) Identify the three major layers that form the diffusion membrane. What is the total thickness of the membrane? (b) Mention the two factors that affect the rate of diffusion of gases. OR Give the difference between Cyclic and Non Cyclic Photo phosphorylation.	

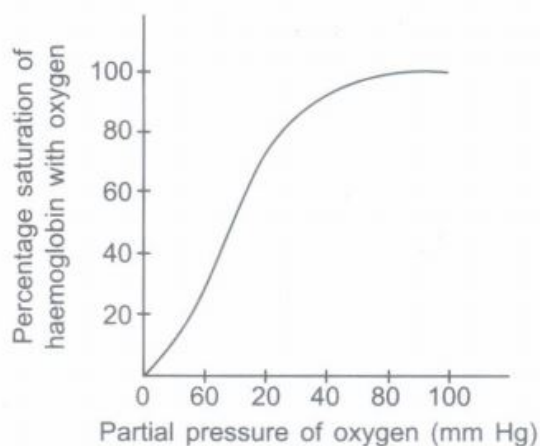
14	An organism or a part of the organism can produce cells during growth in a variety of ways. The following figure is a diagrammatic representation of two types of growth, A and B. Identify the types of growth A and B. Differentiate between them with an example of each. OR Define Respiratory Quotient ? What is the value of R.Q.for protein,fat,carbohydrate.	3
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Section- D

15	The flow chart given below represents the major pathways of anaerobic respiration. Answer the questions that follow: (a) Identify A, B, C and D. (b) Name the two enzymes involved in the conversion of pyruvic acid to C. OR Describe the Calvin cycle with diagram.	4
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16	Study the graph given below and answer the questions that follow: (a) Name and define the curve. (b) What is the significance of plotting this curve? (c) How much of oxygen is transported by every 100 ml of blood under normal physiological conditions? OR Explain Amphobolic pathway with the help of D	4
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Section- E

17	Explain the process of plant growth. Discuss the phases involved in it. OR What are plant hormones? Describe the major types of plant hormones and their functions. Describe the chemiosmotic hypothesis of ATP formation with drawing?	5
18	OR Describe the process of glycolysis in plants. What are its key steps, products, and the role of enzymes?	5

