SET - A

INDIAN SCHOOL SOHAR
UNIT TEST – II (2023 – 2024)
BIOLOGY (044)

Date: 17/01/2024 **Time: 40 min**
Class: XI **Max. Marks: 20**

General Instructions

(i) All questions are compulsory.
(ii) The question paper has five sections and **10** questions.
(iii) **Section–A** has 6 questions of 1 mark each; **Section–B** has 1 questions of 2 marks; **Section– C** has 1 questions of 3 marks **Section– D** has 1 case-based questions of 4 marks ; and **Section–E** has 1 questions of 5 marks.
(iv) Wherever necessary, neat and properly labelled diagrams should be drawn.

Q. No	QUESTIONS	MARKS
	SECTION A	
1.	How many molecules of ATP are produced by the complete oxidation of one molecule of acetyl CoA? (a) 30 (b) 24 (c) 18 (d) 12	**1**
2.	The QRS complex in a standard ECG represents; (a) Repolarisation of ventricles. (b) Depolarisation of ventricles. (c) Repolarisation of atria. (d) Depolarisation of atria.	**1**
3.	Chemiosmotic hypothesis of ATP synthesis in chloroplasts is based on, (a) Accumulation of Na+ ions in the thylakoids. (b) Proton gradient between thylakoid lumen and stroma. (c) Accumulation of K+ ions in the thylakoids. (d) Membrane potential.	**1**
4.	Foolish seedling disease is associated with, (a) Gibberellins. (b) Auxin. (c) Cytokinins. (d) ABA.	**1**
	Following questions consist of two statements -Assertion (A) and Reason (R). Answer these questions by selecting the appropriate option given below: **(a) Both assertion and reason are true and reason is the correct explanation of assertion.** **(b) Both assertion and reason are true and reason is not the correct explanation of assertion.** **(c) Assertion is true but reason is false.** **(d) Assertion is False but reason is true.**	
5.	Assertion: Sino-atrial node is described as the pacemaker of the heart. Reason : Sino-atrial node is situated in the right upper corner of the right atrium.	**1**
6.	Assertion: Acetyl CoA is the connecting link between glycolysis and Krebs cycle. Reason : Pyruvic acid is converted into acetyl CoA in the mitochondrial matrix.	**1**

	SECTION B	
7.	Mention the two steps in glycolysis, where ATP is consumed.	**2**
	SECTION C	
8.	Expand PEP. Where is it produced in C_4 plants? What is its role in the biosynthetic process?	**3**
	SECTION D	
9.	The gaseous plant growth regulator, ethylene could fit into either of two groups of PGRS - promoters and inhibitors, though largely it is an inhibitor. (a) Name two sites in plants where ethylene is synthesised in large amounts. (b) How does ethylene help in; (i) Increasing the absorptive surface in plants? (ii) Keeping the leaves and upper parts of the shoot to remain above water in deep water rice plants? (c) Name the most widely used compound as a source of ethylene in agriculture. Mention any two of its functions.	**4**
	SECTION E	
10.	(a) What is lymph? Write its two functions. (b) Where are Bicuspid and Tricuspid valves located in the human heart? (c) Name the blood vessels that bring oxygenated blood from lungs to heart.	**5**

****