

# <u>Date: 6-12-2024</u>

# LGS GROUP OF COLLEGES

TEST#

**Biology** 

#### MONTHLY TEST

T

Subject: Biology	Name:	Roll No:	
Time: 60 mins	Objective		Marks = 35

### SECTION-I OBJECTIVE TYPE

Note: Four possible answer A, B, C and D to each question are given. The choice which you think is correct, fill the circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.  $(1 \times 11 = 11)$ 

<b>Q1.</b>	Select	the right option.				
1)	Which of the following is not the wavelength of visible light?					
	A.	380 nm	B.	750 nm		
	C.	580 nm	D.	560 mm		
2)	Which of the following wavelength is least absorbed by chlorophyll?					
	A.	Red	B.	Green		
	C.	Blue	D.	Orange		
3)	Which of the following is irrelevant?					
	A.	Calvin cycle	B.	Dark reaction		
	C.	Light reaction	D.	C <sub>3</sub> pathway		
4)	Which of the following accepter is absent during cyclic phosphorylation?					
	A.	Cytochrome complex	B.	Ferredoxin		
	C.	NADP	D.	Plastocyanin		
5)	Which of the following is end product of calvin cycle?					
	A.	Glucose	B.	PGA		
	C.	G3P	D.	Starch		
6)	Which of the following mechanism is involved in the synthesis of ATP?					
	A.	Reduction	B.	Oxidation		
	C.	Chemiosmosis	D.	None of these		
7)	The percentage of photosynthesis in land plants is					
	A.	5 %	B.	60 %		
	C.	10 %	D.	20 %		
8)	How many atoms of oxygen are present in chlorophyll b?					
	A.	02	B.	04		
	C.	06	D.	08		
9)	It is a measure of effectiveness of light of various wavelengths in driving photosynthesis.					
	A.	Emission spectrum	B.	Absorption spectrum		
	C.	Atomic spectrum	D.	Action spectrum		
10)	Which one of the following is a universal photosynthetic pigment?					
	A.	Chl a	B.	Xanthophyll		
	C.	Chl b	D.	Carotenoids		
11)	Which part of chlorophyll molecule absorbs light?					
	A.	Phytol	B.	Pyrrole		
	C.	Porphyrin	D.	Thylakoid membrane		



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**MT-2** 

MONTHLY TEST

XI

### SECTION-II SUBJECTIVE TYPE

#### Q2. Write short answers.

 $(8 \times 2 = 16)$ 

- i) Is there any exchange of gases between leaves and atmosphere during dawn and dusk. If not then why?
- ii) How it was proved that oxygen was released from H<sub>2</sub>O not from CO<sup>2</sup>?
- iii) Differentiate between absorption spectrum and action spectrum.
- iv) Differentiate between chlorophyll a and chlorophyll b.
- v) What is porphyrin ring?
- vi) What are accessory pigments?
- vii) What do you know about chemiosmosis?
- viii) Define photosystems and what are the part of a photosystem?

### **SECTION – II (PART–II)**

#### Note: Attempt one question.

(4 + 4 = 8)

Q3. a) Explain role of carbon dioxide a photosynthetic reactant.

(04)

b) Draw and label the diagram of calvin cycle. (Description not required) (04)