

①

Sethu Bhaskara Matric Hr. Sec. School
Common Half-Yearly Exam - 2022

Class: XI Subject: Bio-Botany Marks: 35

Answer Key
Section-I

Choose the correct answer: 8x1=8

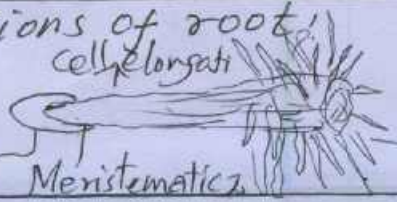
Q.No	Answer	Marks
1.	b) Bryophytes	1
2.	a) Lack of motile structures	1
3.	c) SynCarpous	1
4.	b) Descending, positively geotropic negatively	1
5.	b) They do not possess actively dividing ^{photo tropic} cambium	1
6.	MA	1
7.	a) Amount of DNA Doubles in each cell	1
8.	b) 2ATP + 3NADPH	1

Section-II

Answer any 4 questions: 4x2=8

9. Plectostele, Example:
 * Xylem plates alternate phloem plates
 * *Lycopodium clavatum*. 2 Marks

10. Dendrochronology.
 * The determination of the age of a tree by counting the annual rings is called dendrochronology. 2 Marks

11. Parts of regions of root:

 Root cap — Meristematic — Cell maturation 2 Marks

12. Floral diagram of *Datura metel*:



2 Marks

13. ~~Photo~~ Phosphorylation.

★ It is a process synthesis of ATP by the Addition of inorganic phosphate to ADP. The addition of phosphate here takes place with the help of light generated electron and so it is called as photophosphorylation.

2 Marks

14. Respiratory Quotient!

★ The ratio of volume of carbon dioxide given out and volume of oxygen taken in during respiration is called Respiratory Quotient.

2 Marks

section - III

Answer any three. Q.No. 19 is compulsory:

3x3=9.

15. Physiological effects of Auxin:
(Any three effects)

3 Marks

16. Differentiate between Aggregate fruit with multiple fruit:

Aggregate fruit

- It is formed from a single flower with an apocarpous pistil
- Collection of simple fruits makes an Aggregate fruit
- Example: Polyalthia

Multiple fruit

- It is formed from whole inflorescence
- Inflorescence along with peduncle forms a compact mass
- Example: Pineapple

3 Marks

17. Ultra structure of Plant cell.

- Diagram
- Any four labels.

2

1
- 3 Marks

18. Distinguish Anatomy of Dicot and Monocot root:

- Any three differences:

3 Marks

19. Hydroponics:

* developed a method of growing plants in nutrient solution.

* In hydroponics roots are immersed in the solution containing nutrients and air is supplied with the help of tube.

3 Marks

(4)

section: IV

Answer all the questions

2x5=10

20 a) Types of placentation

- Types
- Examples
- diagram

3

1

1

- 5 Marks

b) Clitoria ternatea

- Any five floral characters.

5 Marks

21. a) Structure of DNA

- Any five points
- Diagram

4

1

- 5 Marks

b) Differentiate Mitosis & Meiosis

- Any 5 differences.

5 Marks

Handling teachers

S. Robert

S.M. Mathan

Mrs. Valareena
23/12