

TIME 1hr. 15 min
Std 12

MARKS-45
unit 1

1. DIFFERENTIATE BETWEEN:

4

- a. Anemochory and autochory
- b. Top senescence and progressive senescence
- c. Aerophonics and Hydroponics
- d. Mesogamy and Porogamy

2. Answer the following-

2

- a. What makes the apical meristem of the root sub-terminal?
- b. Why do plant cell not burst when placed in water?
- c. What happens if a flower bud is emasculated and auxin applied on the stigma?
- d. Why is propagation through grafting not successful in monocot?

3. NAME THE FOLLOWING-

4

- a. Non technical term for periderm
- b. The water present in the soil not available to plants
- c. The shape of guard cells in grasses
- d. The sleep movements in leguminous plants.

PART 2- ANSWER THE FOLLOWING-

1. The overall rate of photosynthesis is higher per unit energy received in flashes than continuously. Justify the statement. 2
2. Give the difference in vascular bundle of monocot and dicot stem. 2
3. Differentiate between dehiscent and non dehiscent fruits. 2
4. Differentiate between chlorophyll a and chlorophyll b 2
5. Describe the events taking place between pollination and fertilization. 3
6. What is nitrogen fixation? Discuss the role of two nitrogen fixing organisms. 3
7. Give the characters of meristematic tissues. 3
8. Give the significance of osmosis. 3
9. Discuss the role of cork cambium in secondary growth. 3
10. Give a brief account of turgor movements shown by *Mimosa pudica* 4
11. What is the importance of the following elements in the life of a plant? In each case mention a deficiency symptom. 4
 1. Nitrogen
 2. Magnesium
 3. Chlorine
12. Describe the non-cyclic photophosphorylation . 4