

CODE: **196409**  
NOVEMBER 2020

TIME: 3 Hrs  
MAX. MARKS: 50

**PART A**

*Answer any TEN questions*

*(10 x 2=20)*

Define / Explain the following.

1. Turgor pressure
2. Donnan equilibrium
3. Abscisic Acid
4. Phytochromes
5. Secondary metabolites
6. Peptide bond
7. Isozymes
8. Cyclic electron transport
9. Nitrogenase
10. CAM pathway
11. Redox potential
12. Bioluminescence

**PART B**

*Answer any TWO questions.*

*(2 x 5=10)*

13. Write notes on ascent of sap.
14. Explain heat shock proteins.
15. Give an account of photoperiodism.
16. Explain the mechanism of action of auxins.
17. How enzymes are classified?
18. What is photorespiration? Add notes on its significance.
19. Describe Krebs cycle.
20. Give the laws of thermodynamics.

**PART C**

*Answer any TWO questions.*

*(2 x 10=20)*

21. Explain in detail the mechanism of opening and closing of stomata
22. Describe the physiological effects of gibberellins and auxins.
23. Illustrate enzyme action and enzyme regulation.
24. Write an essay on nitrogen fixation.
25. Describe the structure and hydrolysis of ATP.