Plant physiology paper essay sample

Nutrition



- 1. Bring out four differences between guttation and transpiration ? 2. Why is abscisic acid called as stress hormone ?
- 3. What is water potential? Name the factors that influence it. 4. How is cyclic photophosphorylation different from non-cyclic photophosphorylation?5. Where in the roots apoplast pathway of water takes place? Why? 6.Define respiratory quotient.
- 7. What is meant by turgor pressure? What is its importance in plants?
- 3 marks questions-
- 8. Why does excess of manganese result in deficiency symptoms of iron, magnesium and calcium in plants? 9. Describe nitrification along with the names of the organisms and equations of chemical reactions? 10. Represent schematically the non-cyclic photophosphorylation. 11. What are the steps involved in formation of a root nodule? 12. All elements that are present in a plant need not be essential to its survival. Comment. 13. Why is the colour of a leaf kept in dark frequently yellow, or pale green? which pigment do you think is more stable. 14. Differentiate between respiration and combustion?

5 marks questions-

15. Why do c3 plants suffer from photo respiratory losses? Explain the mechanism of photo respiratory mechanism. 16. Describe the electron transport system operating in mitochondria. 17. What do you understand by photoperiodism and vernalisation? Describe their significance. 18. Name at least five different deficiency symptoms in plants. Describe them and correlate them with the concerned mineral deficiency. 19. Explain Blackman's law of limiting factors.

- 20. What is oxidative phosphorylation?
- 21.(1)what is critical concentration of elements in plant nutrition? (2)Define photoperiodism. What are short day plants? Give two examples