

16P328

(Pages:2)

Name.....

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, OCTOBER 2017

(Regular/Supplementary/Improvement)

(CUCSS - PG)

CC15P BO3 C09 - PLANT PHYSIOLOGY, METABOLISM AND BIOCHEMISTRY

(Botany)

(2015 Admission Onwards)

Time: Three Hours

Maximum: 36 Weightage

I. Answer *all* questions very briefly:

1. Define Saponification.
2. What is Gluconeogenesis?
3. What are Cryptochromes?
4. What are Allosteric enzymes?
5. Co enzymes.
6. Comment on cohesion and adhesion properties of water?
7. Ammonification ?
8. Comment on shuttle system?
9. What are heat shock proteins?
10. Comment on Alternate Oxidase?
11. Differentiate Denaturation and Renaturation of protein?
12. Comment on Thermogenesis?
13. What are Zwitter ions?
14. What is meant by Anapleurotic reaction?

(14 x 1 = 14 Weightage)

II. Answer *any seven* questions not more than **100** words.

15. Discuss the mechanism of nitrogen fixation?
16. Write an account on factors affecting seed germination.
17. Briefly explain the mechanism of enzyme action.
18. Describe biosynthesis of pyrimidines.
19. Explain regulation of Beta oxidation.
20. Comment on Theories of Stomatal mechanism
21. Discuss on amphibolic nature of TCA cycle.
22. Discuss in brief the link between primary and secondary metabolism.

23. Write an account on response of plants to Auxin.

24. Comment on regulation of Glycolysis.

(7 x 2 = 14 Weightage)

III. Answer *any two* questions in **300** words each :

25. Explain how plants respond to different type of stress.

26. Discuss in detail the cyclic and non-cyclic photophosphorylation.

27. Write an account of CO₂ fixation in plants.

28. Discuss the three dimensional structure of proteins. Add a note on its biological importance.

(2 x 4 = 8 Weightage)
