

C 83716

(Pages : 2)

Name.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2015

(CUCSS)

Botany

BO 02 CT 07 – PLANT ECOLOGY AND CONSERVATION BIOLOGY, PHYTOGEOGRAPHY AND FOREST BOTANY

Time : Three Hours

Maximum : 36 Weightage

I. Answer *all* the questions very briefly :

1. Explain the phenomenon of El-Nino.
2. Describe the role of decomposers in an ecosystem.
3. What are the major activities of UNEP?
4. What do you mean by 'vulnerable species'?
5. What are hot spots? Give *two* examples from India.
6. Explain Gaia hypothesis.
7. Differentiate circumboreal and circumastral distribution.
8. Explain theory of glaciation.
9. What are the features of social forestry?
10. What is MAB programme? What are its major functions?
11. Describe the ecological significance of buffer zone.
12. Describe biosphere reserve. Name a biosphere reserve in South India.
13. What is ecotone?
14. What is ecological amplitude?

(14 × 1 = 14 weightage)

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

15. Briefly describe the productivity and energy flow of a pond ecosystem.
16. Describe the characteristics of a population.
17. Differentiate passive and active remote sensing.

Turn over

18. Write a note on botanical zones of India.
19. Bring out the consequences of deforestation.
20. What are the salient features of a wet land ecosystem?
21. Explain *in-situ* and *ex-situ* conservation with suitable examples.
22. Explain how forests influence the environment.
23. 'The pyramid of energy will be always upright'. Explain.
24. What are the reasons for endemism?

(7 × 2 = 14 weightage)

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

25. Write an essay on single channel energy flow model of a fresh water ecosystem.
26. Write an essay on remote sensing. Enumerate the application of remote sensing in ecosystem and resource management. Explain your answer with suitable examples.
27. Describe the causes, effects and control of air and water pollution.
28. Write an essay on bioremediation with special reference to phytoremediation with suitable examples.

(2 × 4 = 8 weightage)