QP CODE: 20000677

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Reg No : .....

Name : .....

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2020

Second Semester

M Sc ZOOLOGY

CORE - ZL010201 - FIELD ECOLOGY

2019 Admission Onwards

9AD23EB1

Time: 3 Hours Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. How do heat shock proteins help organisms in coping with heat stress?
2. What do you mean by: a) Timberline b) Urohydrosis.
3. Which type of survivorship curve is exhibited by humans? Give reason.
4. Write briefly on the concept of ecological footprint.
5. 'Predators have evolved several adaptations to help them catch prey'. Justify the statement using examples.
6. Define biological control. What are the attributes of a successful biological control agent?
7. Which are the different types of solid wastes?
8. What are different forest resources of India?
9. What is green technology?
10. Comment on the importance of remote sensing in ecology.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Write notes on the adaptations of organisms to low oxygen availability.
12. How do animals maintain water balance? Explain.

13. Give an account on population fluctuations and cycles.

14. Explain the factors that contribute to population regulation.

15. Connell's experiments with barnacle species showed that one species of barnacles competitively exclude another species.

    1. Define the competitive exclusion principle.
    2. How do the species overcome this competitive exclusion?

16. Cannibalism is a type of intraspecific predation. Justify the statement by giving examples.

17. Write notes on the different methods used in the disposal of radioactive waste.

18. Explain different Fresh water sources and its conservation measures.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Write an essay on the various modes of nutrient acquisition in animals.

20. Discuss the causes and effects of global warming. How much do human made greenhouse gases contribute to global warming and what measures need to be taken to control global warming?

21. Animals have evolved many different anti-predator adaptations over time to reduce their chances of being eaten. Discuss in detail about the predator-anti predator adaptation.

22. Explain about the different biological gas treatment systems.

(2×5=10 weightage)