C 83637 (Pages : 2) Name.....33

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2015

(CUCSS)

Zoology

ZO 2C T05—ECOLOGY AND ETHOLOGY

Time : Three Hours Maximum : 36 Weightage

I. Answer *all* fourteen questions :

1 Distinguish between "Habitat and Niche".

2 What are "ecotones" ?

3 What is the significance of "Age structure" of a population ?

4 What does Gamma diversity imply ?

5 What is the significance of Gondwana land ?

6 Mention the difference between "Pyramid of Numbers" and "Pyramid of Energy".

7 Distinguish between "Symbiosis" and "Mutalism".

8 Mention the typical features of Tundra.

9 What are "ecological hotspots" ? Give *two* examples.

10 What is meant by "conditioning" ?

11 Explain the behavioural uniqueness of eco-location.

12 What is meant by "stimulus filtering" ?

13 Briefly explain "selfish gene" concept.

14 Mention what "arousal" is.

(14 × 1 = 14 weightage)

II. Answer any *seven* of the following :—

15 Give a brief account of Biological Rhythms.

16 Explain the "Ethological aspects" of "conflict".

17 Give an account of the "Navigation cues" employed by animals druing Migration.

18 Explain the phenomenon of "Instinctive behaviour".

19 Give a summary of the impact of "Radiation Pollution".

20 Explain the ecological features of "tropical rain foersts".

21 Describe the "density independent" factors of a population.

22 Evaluate the dynamic nature of Estuarine ecosystem.

Turn over

23 Explain the phenomenon of "character displacement".

24 What are the different types of "growth curves" ? Explain the typical features of each.

(7 × 2 = 14 weig

III. Answer any *two* of the following ::—

25 Give an account of the dynamcis and mechanisms in "Ecological Succession".

26 Citing example, explain species interaction.

27 Describe the phenomenon of "motivation" as revealed by studies on guppies.

28 Describe the social organization of "Termites". Add a note on its survival value.

(2 × 4 = 8 weig