



Reg. No. :

Name :

V Semester B.Sc. Degree (CCSS – Reg./Supple./Improve.)

Examination, November 2014

CORE COURSE IN ZOOLOGY

5B06ZLG : Environmental Biology and Zoogeography

Time : 3 Hours

Max. Weightage : 25

SECTION – A
(Environmental Biology)

I. Answer **any one** (Weightage 4) :

- 1) Comment on causes of biodiversity depletion and strategies of biodiversity conservation.
- 2) What are the causes and effects of radioactive pollution ? Suggest relevant remedial measures for it. (1×4=4)

II. Answer **any one** (Weightage 4) :

- 3) What do you mean by population ? Explain its properties.
- 4) Explain population interaction. (1×4=4)

III. Answer **any three** (Weightage 2 each) :

- 5) Give an account of flow of energy in an ecosystem.
- 6) Comment on abiotic factors that influence an ecosystem.
- 7) Write a short note on nitrogen cycle. What is nitrogen fixation ?
- 8) Explain Shelford's law of tolerance.
- 9) What do you mean by greenhouse effect ? Mention its impacts. (3×2=6)

P.T.O.

IV. Answer **any four** (Weightage **1 each**) :

- 10) Explain the properties of the Forest Conservation Act, 1972.
- 11) Explain edge effect.
- 12) Population growth curves.
- 13) Food web.
- 14) Acid rain.
- 15) Ecological indicators.
- 16) What is biotic potential.

(4×1=4)

V. Answer the following (Weightage **1 each**) :

- 17) a) _____ is a negative population interaction.

[a. Commensalism b. Mutualism c. Parasitism]

- b) Name any two green house gases.
- c) Name a faunal species endemic to Western Ghats.
- d) Name the two biological hotspots in India.

18) Match the following :

- | | | |
|-----------------|---|-----------------------|
| a) Mutualism | – | Extinction of species |
| b) Cannibalism | – | Western Ghat |
| c) Hot spot | – | Positive interaction |
| d) Habitat loss | – | Type of predation |

(2×1= 2)

SECTION – B
(Zoogeography)VI. Answer **any two** (Weightage **2 each**) :

- 19) Comment on oceanic island.
- 20) Describe barriers to animal distribution.
- 21) Explain isolated distribution of animals.
- 22) Briefly describes fauna features of palaearctic region.
- 23) Match the following (Weightage **1 each**) :

- | | | |
|---------------------|---|-----------------------------|
| a) Floristic region | – | Ethiopian realm |
| b) Nearctic region | – | Australian realm |
| c) Marsupials | – | Gangetic plain |
| d) African Elephant | – | Greenland and North America |

(2×2= 4)

(1×1= 1)