

Total Pages : 3

End Semester Examination of Semester-I, 2015

Subject : ZOOLOGY (PG)

Paper : ZPGT-103 (Gr A + Gr B)

Full Marks : 40

Time : 2 Hrs

The figures in the margin indicate the marks corresponding to the question

Candidates are requested to give their answers in their own word as far as practicable.

Illustrate the answers wherever necessary.

Use separate Answer scripts for Group A and Group B

Group A

**Answer Question No. 1 and
any one out of Question No. 2 and Question No. 3**

1. Answer any five questions : 2x5=10
- i) With the help of a diagram show which island will have more species, an island which is nearer to mainland or an island which is far away from the mainland.
 - ii) Differentiate between an edge and an ecotone.
 - iii) What is ecological equilibrium?
 - iv) Differentiate between direct competition and apparent competition. Give example.

(2)

- v) Differentiate between habitat and niche.
 - vi) Distinguish between semelparity and iteroparity.
 - vii) What is phenotypic plasticity?
 - viii) What do you mean by ecological guild?
2. In what way stability of an ecosystem is maintained through feedback control? How redundancy of components influences ecosystem stability? 7+3
3. What are r and K -selected species? Write a brief note on Lotka-Volterra model of predator-prey interaction and its significance. 2+5+3

Group B

Answer Question No. 1 and
any one out of Question No. 2 and Question No. 3

1. Answer any five questions : 2x5=10
- i) What is a teratogen?
 - ii) What do you mean by Median Tolerance limit?
 - iii) What is Toxicometries?
 - iv) What are bioindicators? Cite example.
 - v) Differentiate 'Biomes' from 'Ecosystem'.
 - vi) Mention the differences between 'Acute Toxicity' and 'Chronic Toxicity'?

- vii) What are the consequences of Eco-terrorism?
viii) Highlight on 'Endocrine disruptions'.
2. Define homeostasis? What are the three main strategies of homeostasis? Differentiate acclimatization & acclimation. 2+4+4
3. What is EIA? Mention major steps in EIA. Discuss on different steps on environmental monitoring. 2+3+5
-