

Use separate answer
script for each group.

B.Sc. (Honours) Examination, 2019

Semester–II

Zoology

Course – ACT-II (Allied)

(For Back Candidates)

Time: Three Hours

Full Marks: 40

Questions are of value as indicated in the margin.

Answer *any four* questions taking *two* from each group.

Group-A

(Economic Zoology and Environmental Biology)

1. Describe the method of induced breeding in fish. List some species of fish where induced breeding is successfully performed. 8+2=10
2. Discuss how acid rain and global warming affect plants and animals. 5+5=10
3. Write down four different species of honey bees with their scientific names. Describe the culture method of honey bees using Langstroth's frame. 2+8=10
4. Write short notes on the following (*any four*): 2½×4=10
 - (a) Composition of silk.
 - (b) Pollination by insects.
 - (c) Morphological modifications of worker honey bees.
 - (d) Glutathione.
 - (e) LC₅₀ value.

Group-B

(Parasitology and Immunology)

1. Define the following terms and provide suitable examples: 2½×4=10
 - (a) Obligate parasite
 - (b) Parasitism
 - (c) Sporadic parasite
 - (d) Zoonosis.
2. Name the pathogenic agent causing malaria. Give a brief account of its life cycle. Add a note on its pathogenicity. 1+6+3=10
3. Describe *Fasciola hepatica* with a neat diagram illustrating the internal structures. Name the different hosts where the parasite completes its life cycle. Mention the free living and parasite stages of it. Add a note on its pathogenicity. 4+2+2+2=10
4. Define antigen and antibodies. Give an account of the mechanism of innate immunity. (1+1)+8=10