Bago University
Department of Zoology
Second Semester Examination, September 2019

Second Year (B.Sc)
(Zoology Specialization)
Answer ALL questions

Zool. 2113
Ornithology
Time Allowed: (3) Hours

I. State TRUE or FALSE to the following statements. **(10 marks)**

1. The forelimbs have transformed into wings in birds.
2. The subclavian artery is very stout and divides into three branches.
3. Avian heart is small-sized, powerful and efficient.
4. The mouth of fowl is extended as a pointed bill, or beak.
5. The varied coloration of feathers results from pigments melanins and lipochromes.
6. The avian skeleton is specialized for strength and for lightness.
7. The muscular system of a chicken comprises of around half of its body weight.
8. All species of birds have bristle feathers.
9. The ear is essential to a bird's balance, a key factor in flying.
10. In birds, the foot usually has five toes.

II. Complete the following statements with appropriate words. **(10 marks)**

1. Body covered with ------in birds.
2. Flight is the main mode of ------in most of world's bird species.
3. Galliformes, includes grouse, quail, pheasant and ------.
4. Avian body temperature does not change with ------ temperature.
5. In *Gallus*, ------ lumbar region is evident.
6. The bird heart has two thin-walled ------ and two distinct ventricles.
7. A bird's lung is perhaps more ------ than that of other vertebrates.
8. The bird brain is proportionately ------ than that of a reptile.
9. Bird urine contains uric acid and ------ salts.
10. The form of beak usually indicates the ------ habits of a bird.

III. Answer ALL questions **(10 marks)**

1. List the organs for flight of birds.
2. Give a systematic classification of Domestic fowl.
3. List the types of feathers.
4. Name the three veins that enter the right atrium.
5. Mention the term 'Hallux'.

IV. Answer ALL questions **(20 marks)**

1. Give a short note of perching mechanism of birds.
2. Give the characters of the family-Pelecanidae and Phalacrocoracidae.
3. Explain the structure of pectoral girdles of fowl.
4. Describe the formation of fertilized egg in birds.

V. Answer any three questions **(30 marks)**

1. Name the morphological volant adaptations and describe any two of them.
2. List an injurious act of birds.
3. Describe the external features of *Gallus domesticus*.
4. State briefly on the sense of hearing in birds.
5. Explain the male reproductive system of fowl with an appropriate diagram.
6. List and describe briefly on four extra embryonic membranes.

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