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Enrollment No.....



Faculty of Science  
End Sem Examination May-2024

FS3EG05 Zoology

Programme: B.Sc. (Hons.)

Branch/Specialisation: Forensic  
Science**Duration: 3 Hrs.****Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- Q.1 i. Linnaeus is credited for introduction of- **1**  
 (a) Binomial system of nomenclature  
 (b) The principle of independent assortment  
 (c) The concept of inheritance of acquired characters  
 (d) All of these
- ii. Canal system found in which phylum. **1**  
 (a) Porifera (b) Coelentrata  
 (c) Protozoa (d) Arthropoda
- iii. Echinoderms and chordates have- **1**  
 (a) Pseudocoelom (b) Schizocoelom  
 (c) Enterocoelom (d) Haemocoel
- iv. Trochophore larva occurs in- **1**  
 (a) Annelida and Porifera  
 (b) Coelenterata and Annelida  
 (c) Mollusca and Coelenterata  
 (d) Annelida and Mollusca
- v. Branchiostoma belongs to- **1**  
 (a) Urochordata (b) Hemichordata  
 (c) Cephalochordata (d) Protochordata
- vi. Golden age of reptiles is- **1**  
 (a) Palaeozoic (b) Mesozoic  
 (c) Coenozoic (d) Proterozoic

- vii. Leishmania donovani belongs to in which phylum? **1**  
 (a) Porifera (b) Coelentrata  
 (c) Protozoa (d) Arthropoda
- viii. Sleeping sickness disease caused by- **1**  
 (a) Trypanosoma (b) Ascaris  
 (c) Liver fluke (d) All of these
- ix. Covid-19 caused by- **1**  
 (a) Virus (b) Bacteria (c) Protozoan (d) Helminths
- x. Major useful product obtained from microbes. **1**  
 (a) Vitamins (b) Single cell protein  
 (c) Antibiotics (d) All of these

- Q.2 i. Write any two special characteristics of phylum Protozoa. **2**  
 ii. Write classification of phylum porifera up to class. **3**  
 iii. Describe life cycle of plasmodium in detail. **5**
- OR iv. Draw a labelled diagram of life cycle of Fasciola hepatica. **5**
- Q.3 i. Write four examples of phylum annelids. **2**  
 ii. Describe water vascular system of starfish in detail. **8**
- OR iii. Write classification of phylum Annelids up to class with examples. **8**
- Q.4 i. Write three differences between poisonous and non poisonous snake. **3**  
 ii. Write essay on migration of birds with characters of aves. **7**
- OR iii. Describe parental care of amphibians in detail. **7**
- Q.5 i. What is parasite? Write down four examples of parasites. **4**  
 ii. Write down diseases, diagnosis, treatment and prophylaxis of leishmania donovani. **6**
- OR iii. Write down diseases, diagnosis, treatment and prophylaxis of trypanosome gambiense. **6**
- Q.6 Attempt any two: **5**  
 i. Write an essay on microbes in agriculture fields. **5**  
 ii. State the role of virus on human health. **5**  
 iii. Write an essay on microbial genetics. **5**

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- Q-1
1. (a) Binomial system of nomenclature.
  2. (a) Porifera
  3. (c) Enterocoelom.
  4. (a) Annelida & Mollusca.
  5. (b) Hemichordata
  6. (b) Mesozoic
  7. (c) Protozoan
  8. (a) Trypanosoma
  9. (a) Virus.
  10. (a) All of these.

- Q-2
- (i) - Any 2 points - 2M
  - (ii) 2-3 points - 1M.  
classification - 2M  
classes (4) - (1 eg)
  - (iii) Introduction, history, diagram / flowchart of life cycle - 3M  
Main causes - 1M.
  - (iv) Introduction - 1M  
history, diagram / flowchart - 3M  
Main causes - 1M.

- Q-3
- (i) 4 eg. - (0.5 each)
  - (ii) systematic order - 1M.  
draw star fish label diagram - 2M.  
labelled diagram of water vascular - 4M.  
Discuss - 3M.
  - (iii) General characteristics - 4M.  
classification - 2M.  
Example - 2M.

- Q-4
- (i) 3 points - 3M.
  - (ii) Migration of Birds - 4M.  
General characteristics - 3M.
  - (iii) Introduction of parental care - 1M.  
Types of parental care - 5M.

Importances - 1M.

5

Q.5 (i)

Definition - 1M.

4 examples / Types of parasite - 3M.

(ii)

Introduction - 1M. (Leishmania)

History - 1M.

str / treatment - 1M.

Life cycle - 3M.

(iii)

Introduction - 1M. (Trypanosome gambiense)

History - 1M.

structure / Treatment - 1M.

Life cycle - 3M.

Q.6

(i)

Microbes - 1M.

Agriculture uses of microbes - 4M.

(ii)

Virus - 1M.

Role of virus in human health - 4M.

(iii)

Introduction - 1M.

DNA & RNA str. - 3M.

Importance - 1M.