

**5/H-63 (v) (Syllabus-2015)**

**2022**

( November )

**ZOOLOGY**

( Honours )

( **Functional Anatomy, Zoogeography  
and Adaptations** )

*Marks : 56*

*Time : 3 hours*

*The figures in the margin indicate full marks  
for the questions*

Answer Question No. 1 and any four from the rest

1. Write, in brief, on any three of the following :

4×3=12

- (a) Corals and coral reefs
- (b) Chewing and sucking mouthparts of insects
- (c) Fins in fishes
- (d) Differences between poisonous/venomous and non-poisonous/non-venomous snakes
- (e) Protective mimicry

2. What is torsion? Describe the process of torsion in Gastropods with the help of suitable diagrams. 1+7+3=11
3. Give an account of the different types of canal system found in sponges with suitable diagrams. 8+3=11
4. (a) Give a comparative account of *Petromyzon* and *Myxine*. 6  
(b) Discuss the affinities of *Amphioxus*. 5
5. Write in detail on the following : 5½+5½=11  
(a) Parental care in amphibians  
(b) Flight adaptations in birds
6. What is zoogeography? Name the different zoogeographical realms of the world. Give an account of the faunal distribution in these realms. 1+3+7=11
7. Give an account of the different modes of nutrition found in Protozoa. 11
8. Write short notes on any *two* of the following : 5½×2=11  
(a) Dentition in mammals  
(b) Aquatic adaptations in vertebrates  
(c) Accessory respiratory organs in fishes

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