

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

2018

(October)

ZOOLOGY

(Honours)

FIFTH PAPER

(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) Spicules of sponges
- (b) Chewing and sucking mouthparts of insects
- (c) Fins in fishes
- (d) Four differences between poisonous/venomous and non-poisonous/non-venomous snakes
- (e) Differences between protective and aggressive mimicry

(2)

2. Define polymorphism. Describe polymorphism in *Siphonophora* with the help of suitable diagrams. Add a note on the significance of polymorphism. $2+7+2=$
3. Describe the general characters and affinities of *Dipnoi*. $5+6=$
4. Describe in detail the following : $5\frac{1}{2}+5\frac{1}{2}=$
 - (a) Coral reefs
 - (b) Migration of fishes
5. Write critical notes on any two of the following : $5\frac{1}{2}\times 2=$
 - (a) Affinities of Onychophora
 - (b) Affinities of *Amphioxus*
 - (c) Affinities of marsupials
6. What is zoogeography? Name the different zoogeographic realms of the world. Describe the faunal distribution in these realms. $1+3+7=$
7. Describe the following : $5\frac{1}{2}+5\frac{1}{2}=$
 - (a) Aquatic adaptations of vertebrates
 - (b) Structural features of a compound eye of insects

(Continued)

(3)

8. Write short notes on any two of the following : $5\frac{1}{2}\times 2=11$
 - (a) Locomotion in Protozoa
 - (b) Dentition in Mammals
 - (c) Coelomoducts in Annelida
