

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

2 0 1 7

(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 which is compulsory
and **four** from the rest

1. Write in brief on any *three* of the following : 4×3=12

- (a) Barrier and Atoll reefs
- (b) Piercing and sucking mouthparts in insects
- (c) Protective mimicry
- (d) Scales in fishes
- (e) Poison apparatus in snakes

(Turn Over)

2. With suitable diagrams, describe the structure and functions of canal system in Porifera. 11
3. Describe the process of torsion and detorsion in gastropods. 11
4. What are accessory respiratory organs? Describe different types of accessory respiratory organs found in fishes. $2+9=11$
5. Describe in detail the following : $5\frac{1}{2}+5\frac{1}{2}=11$
 - (a) Affinities of Monotremata
 - (b) Desert adaptations
6. Describe in detail the comparative anatomy of kidney in vertebrates. 11
7. Describe the following : $5\frac{1}{2}+5\frac{1}{2}=11$
 - (a) Parasitic adaptations
 - (b) Flight adaptation in birds
8. Write short notes on any *two* of the following : $5\frac{1}{2}\times 2=11$
 - (a) Vision in insects
 - (b) Locomotion in Protozoa
 - (c) Affinities of Balanoglossus

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