

**B. Sc. DEGREE EXAMINATION APRIL 2015**  
**BRANCH VIA. – ADVANCED ZOOLOGY AND BIOTECHNOLOGY**  
**SECOND SEMESTER**

**COURSE : MAJOR – CORE**  
**PAPER : CHORDATA**  
**TIME : 3 HOURS** **MAX. MARKS: 100**

**SECTION – A**

**ANSWER ALL QUESTIONS :** **(10 X 3 = 30)**

**1. FILL IN THE BLANKS:**

- a) Balanoglossus is also known as \_\_\_\_\_.
- b) Wheel organ is present in \_\_\_\_\_.
- c) The skin of shark contains \_\_\_\_\_ types of scales.
- d) \_\_\_\_\_ is a limbless amphibian.
- e) The oil gland found in the mid region of the uropygium of pigeon is called \_\_\_\_\_ gland.
- f) Diastema is due to the absence of \_\_\_\_\_ teeth.

**2. MENTION THE ZOOLOGICAL NAME OF THE FOLLOWING:**

- a) Murrels    b) Flying fish    c) Mid wife toad    d) Russel's viper
- e) Ostrich    f) Spiny ant eater

**3. GIVE THE COMMON NAME OF THE FOLLOWING:**

- a) *Branchiostoma lanceolatum*    b) *Oreochromis mossambicus*
- c) *Rhacophorus pleurosticus*    d) *Naja naja*    e) *Ornithorhyncus*    f) *Pteropus*

**4. NAME THE ORDER TO WHICH THE FOLLOWING BELONG:**

- a) Ascidian    b) Frog    c) Snakes    d) Pigeon    e) Rabbit    f) Whales

**5. GIVE THE FUNCTIONS OF THE FOLLOWING:**

- a) Quill feather    b) Pancreas    c) Diaphragm

**6. MATCH THE FOLLOWING:**

- a) Amphioxus    -    Catadromous migration
- b) Shark    -    nuptial pads
- c) Eel    -    Herpetology
- d) Male frog    -    Coprophagy
- e) Reptiles    -    Solenocytes
- f) Rabbit    -    Heterocercal tail

7. **DISTINGUISH BETWEEN:**
- a) Cold – blooded and Warm – blooded animals
  - b) Neurotoxin and Haemotoxin
  - c) Hibernation and Aestivation
8. What are the following?
- a) Pecten      b) Syrinx      c) Baleen plates
9. Draw a neat labeled diagram of brain of rabbit.
10. Write the external structure of Petromyzon.

**SECTION – B**

**ANSWER ANY FIVE QUESTIONS :**

**(5 X 6 = 30)**

- 11. Briefly explain the feeding mechanism in Amphioxus.
- 12. Describe retrogressive metamorphosis in Ascidian.
- 13. Write a short note on any four accessory respiratory organs in fishes.
- 14. Describe the structure of poison apparatus in snakes.
- 15. Briefly explain the respiratory system in pigeon.
- 16. Write a short note on neoteny in Urodeles.
- 17. 'Egg laying mammals are primitive mammals' - Justify.

**SECTION – C**

**ANSWER ANY TWO QUESTIONS :**

**(2 X 20 = 40)**

- 18. Give an account of parental care in fishes.
- 19. "Skull is the basis for classification of reptiles" – Discuss.
- 20. Discuss the flight adaptations in birds.
- 21. Write an essay on dentition in mammals.

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