

**SARDAR PATEL UNIVERSITY**  
**F. Y. B. Sc. SEMESTER - II Examination 2011**  
**Monday, 25<sup>th</sup> April, 2011**  
**3:00 pm to 5:00 pm**  
**US02CBIO01-Chordate Biology and Physiology**

**Total Marks: 70**

- Note:- (i) Figures to the right indicate marks.  
(ii) Draw neat and labelled diagrams wherever necessary.

**Q.1 Multiple choice Questions. [10 x 1]**

**[10]**

1. Number of gills present in Lamprey  
(a) 3 (b) 5  
(c) 6 (d) 7
2. The Petromyzon larva is called  
(a) Tornaria (b) Ammocoete  
(c) Crinoid (d) Nauplius
3. \_\_\_\_\_ coils her body around the eggs  
(a) Hyla (b) Rana  
(c) Ichthyophis (d) Toad
5. Champion long distance migrant is  
(a) Snow partridges (b) Chicades  
(c) European white stork (d) Arctic tern
6. Dental formula of rabbit is  
(a)  $\frac{2123}{2033}$  (b)  $\frac{2103}{2103}$  (c)  $\frac{2033}{1023}$  (d)  $\frac{2234}{2033}$
7. The tail in rabbit serves as  
(a) Balancing organ (b) Sensory organ  
(c) Decorative structure (d) Hearing aid
8. The functional unit of kidney is  
(a) Nephron (b) Bowman's capsule  
(c) Cortex (d) Medulla
9. Life span of RBC is  
(a) 60 days (b) 90 days  
(c) 120 days (d) 150 days
10. Which cells are also called polymorphonuclear cells  
(a) Neutrophils (b) Monocytes  
(c) Both (d) None

**Q.2 Answer the following in short.[Attempt any ten]**

**[20]**

1. Give an outline classification of superclass Tetrapoda.
2. Mention the characteristic features of ammocoete larva.
3. Enlist the types of scales found in fishes.
4. Discuss the significance of migration in birds.
5. Give the structure and functions of "Down feathers".
6. Enlist the methods of direct carrying by parents in Amphibians.

**[P.T.O.]**

7. What is coprophagy?
8. Mention the structure and functions of pancreas in Rabbit.
9. List four groups of veins found in Rabbit.
10. Give the structure and functions of Haemoglobin.
11. Give the composition of Urine.
12. List the granulocytes of blood.

**Q.3**

- (a) Describe the digestive system and feeding in Petromyzon. [05]
- (b) List the Parental caring in fishes. Explain any three in brief. [05]

**OR**

**Q.3**

- (a) Write a note on : Migration in fishes. [05]
- (b) Explain the respiratory system of Lamprey. [05]

**Q.4**

Write a note on : Flight adaptations. [10]

**OR**

**Q.4**

- (a) Explain how amphibians exhibit parental care by nests, nurseries or shelters. [05]
- (b) Write an essay on : Kinds of Migration in birds. [05]

**Q.5**

- (a) Describe the internal structure of Heart in Rabbit. [05]
- (b) Explain the actions of bile. [05]

**OR**

**Q.5**

- (a) Write a note on : Intestinal digestion in Rabbit. [05]
- (b) Discuss the position and structure of respiratory organs in Rabbit. [05]

**Q.6**

- (a) Describe the structure of human kidney. [05]
- (b) Explain the structure and functions of Leucocytes. [05]

**OR**

**Q.6**

- (a) Explain the physiology of excretion in human kidney. [05]
- (b) Mention the functions of blood plasma. [05]

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(2)