

BS/2119 SHEET NO. 1

5217/NH

Total No. of Sheets used ~~1 (four)~~

Total No. of Questions ~~5~~

Subject ~~Zoology~~

Paper - I

Title of the Paper Chordates - I

Time allowed 3 hours

Maximum Marks 40

Minimum Pass Marks 8

Note : The candidates are required to attempt two questions each from Section A & B Section C will be compulsory

Please assign marks to each question

Section A

1. Discuss in detail echinoderm theory of chordate origin. (6)
2. Give an account on morphological features of *Petromyzon*. (6)
3. Define filter feeding. Describe the feeding mechanism of *Herdmania* in detail. (1.5+4.5)
4. Give a brief note on the followings:
 - a. Tadpole larva of *Herdmania*.
 - b. Primary and secondary gill bars of *Branchiostoma*. (3X2)

Section B

5. Define amphibians. How many types of respiration are found in *Rana tigrina*. Discuss the most important respiration in frog to support their amphibious nature. (1+1.5+4)
6. What is feeding habit of *Labeo rohita*? Discuss digestive system of the fish in detail. (1+5)
7. Describe the types of scales in fishes. What is the importance of scales in fishes? (4.5+1.5)
8. Give the classification upto orders of the followings:
 - a. *Narcine*
 - b. *Mystus*
 - c. *Amphiuma*
 - d. *Hyla*(1.5X4)

Section C

9. Write a brief note on the followings:

- | | |
|--|--|
| i Parental care | v Muller's organ |
| ii Sketch labelled diagram of venous heart | vi Solenocyte |
| iii Neural complex in <i>Herdmania</i> | vii <i>Ammocoetes</i> larva |
| iv Notochord | viii V th cranial nerve of fish |

(8X2)