

CU-05-8020

Dr. Rajesh Verma, Assistant Professor and head, U.G. Department of Zoology, B.S. Dumas (Buxar).
Notes for B.Sc part, B.Sc part 2, Paper 2 and (A)

Question: Amphioxus ko classify karke hua Schizoa Yastani karke.

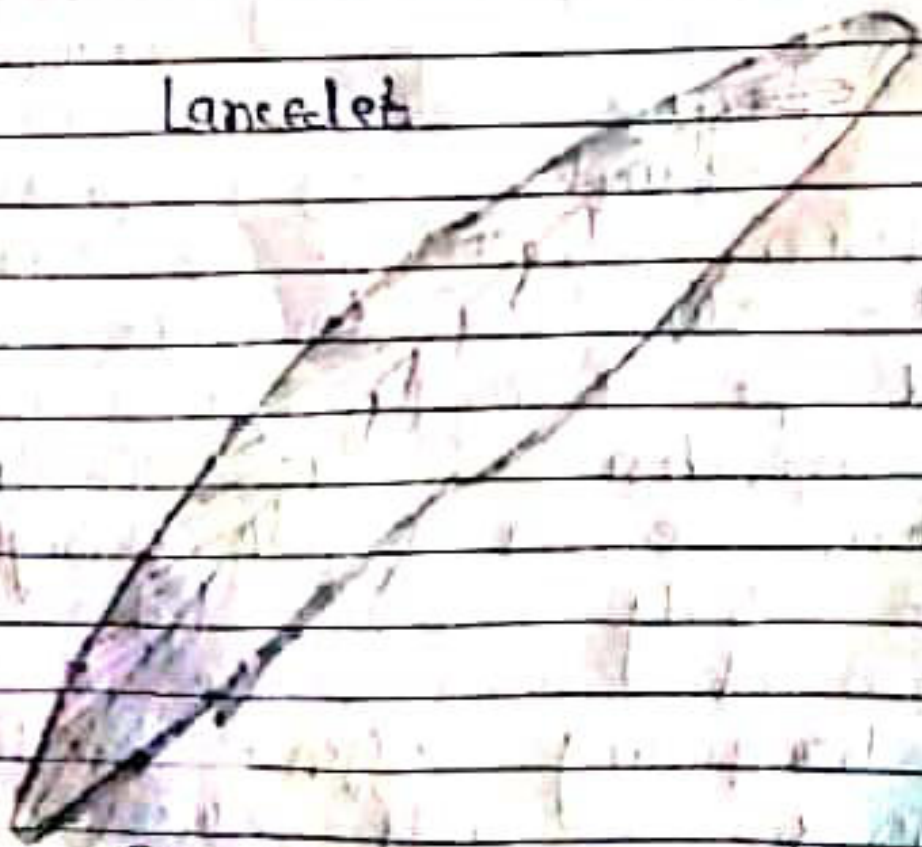
Ans: The lancelets also known as amphioxii (Singular: amphioxus) consist of some 30-35 species of fish-like benthic filter feeding chordates in the order Amphioxiformes. They are the modern representatives of the subphylum Cephalochordata. Lancelets closely resemble, and are believed to be related to 530-million-year old pikaia, fossils of which



The known from the Burgess
Shale. Zoologists are interested in
them because they provide evolutionary
insight into the origins of
vertebrates. Lancelets contain many
organs and organ systems that are
clearly related to those of modern
fish but in more primitive
forms. therefore they provide
a number of examples
of possible evolution. a number
of examples of possible
evolutionary adaptation. for example, the
gill-slits of lancelets are
used for feeding only, and not
for respiration. the circulatory
system carries food throughout
the body, but does not
have red blood cells or hemoglobin
for transporting oxygen. lancelet
genomes hold clues about
the early evolution of vertebrates
by comparing genes from lancelets

With the same genes in vertebrates, the change in gene function as vertebrates evolved can be discovered. The genome of a few species in the genus *Branchiostoma* have been sequenced: *B. floridae*, *B. belcheri*, *B. lanceolatum*.

Lancelet



Branchiostoma lanceolatum.

Scientific Classification

Kingdom : Animalia

Phylum : Chordata

Subphylum : Cephalochordata

Class : Leptocardii (Müller, 1845)

Order : Amphioxiformes (Obscure, 1886)

Families

→ Azygometronidae

→ Branchiostomidae

Synonyms

Branchiostomiformes :-

In Asia, lancelets are harvested commercially as food for humans and domesticated animals. In Japan, amphioxus (*A. balchovi*) has been listed in the registry of "Endangered animals of Japanese Marine and Fresh water organisms."