



Seat No. _____

H AJ-003-1015017

B. Sc. (Sem.-V) (WEF-2016)

Examination

May - 2023

Z-501 : Functional Anatomy of Non-chordates

Faculty Code : 003

Subject Code : 1015017

Time : $2\frac{1}{2}$ Hours / Total Marks : 70

- Instructions :**
- (1) Draw neat and labelled diagram wherever necessary.
 - (2) Numbers to the right side indicate full marks of the questions.

- 1 (a) Answer the following questions: 4
- (1) Define Non-chordates.
 - (2) Who is father of Zoology ?
 - (3) Who has proposed binomial nomenclature ?
 - (4) Main characters of Protista phylum - any two.
- (b) Answer in brief : (any **one**) 2
- (1) General character of porifera phylum - any four.
 - (2) Important characters of protozoa phylum.
- (c) Answer in detail : (any **one**) 3
- (1) Class name with example : Mollusca phylum.
 - (2) General character of phylum Annelida.
- (d) Write a note on : (any **one**) 5
- (1) Explain phylum - Hemichordata.
 - (2) Explain phylum : Echinodermata with example.

- 2 (a) Answer the following questions : 4
 (1) Scorpion belongs to which class ?
 (2) How many pairs appendages in Scorpion ?
 (3) Habitat of sepia.
 (4) Sepia belongs to which phylum ?
- (b) Answer in brief : (any **one**) 2
 (1) Draw and labels - Ink-sac in sepia.
 (2) Pectin in Scorpion.
- (c) Answer in detail : (any **one**) 3
 (1) Classify with reasons - Sepia.
 (2) Explain book lungs of scorpion.
- (d) Write a note on : (any **one**) 5
 (1) Explain nervous system of sepia with figure.
 (2) Ventral view of Scorpion with figure.
- 3 (a) Answer the following questions : 4
 (1) Locomotory organs of Protozoa.
 (2) What are coral reefs ?
 (3) Define polymorphism.
 (4) Give two name - parasitic protozoans of man.
- (b) Answer in brief : (any **one**) 2
 (1) Types of nutrition in protozoa.
 (2) Importance of polymorphism.
- (c) Answer in detail : (any **one**) 3
 (1) Importance of sponge industry.
 (2) Explain coral.
- (d) Write a note on : (any **one**) 5
 (1) Reproduction in sponge.
 (2) Details in coral reefs.
- 4 (a) Answer the following questions : 4
 (1) What is metamerism ?
 (2) Why endoparasite is not digested by digestive juices of the host ?
 (3) Define metamorphosis.
 (4) Ancylostomiasis is caused by which animal ?

- (b) Answer in brief : (any **one**) 2
(1) Draw and Labels - Megalopa larva
(2) Draw and labels - Mysis Larva
- (c) Answer in detail : (any **one**) 3
(1) Mode of infection and disease caused of Ascaris.
(2) Zoological importance of Peripatus.
- (d) Write a note on : (any **one**) 5
(1) Metamorphosis in insects.
(2) Metamerism and its significance in Annelida.
- 5** (a) Answer the following questions : 4
(1) Define Torsion.
(2) Function of water vascular system.
(3) Give the name of Balanoglossus larva.
(4) Write two larval forms name of Echinodermata phylum.
- (b) Answer in brief : (any **one**) 2
(1) Detorsion
(2) Diagram of Brachiolaria larva
- (c) Answer in detail : (any **one**) 3
(1) Ophioplutes larva.
(2) Tornaria larva.
- (d) Write a note on : (any **one**) 5
(1) Water vascular system in Echinodermata phylum.
(2) Foot in Mollusca.
-