

Mid-West University
Examinations Management Office
Final Examinations -2081

Bachelor level/ B. Sc./ 2nd Semester

Full marks:60

Time: 3 hrs

Pass marks: 30

Subject: Higher Non-Chordata and Hemichordata (ZOO423/323)

Candidates are required to give answers in their own words as far as practicable. Figures in the margin indicate full marks.

Group A

1. Answer ANY SEVEN questions in very short. [7*1=7]
- What are the excretory organs of arthropods?
 - Give the systematic position of prawn.
 - Name the classes of mollusks with an example.
 - What is protoconch?
 - Mention the function of radula.
 - What is mosaic vision?
 - How can you distinguish male and female prawn externally?
 - Name any two larval forms of Echinodermata.

Group B

Answer the following questions in brief [7*3=21]

- Write in brief about the morphology of the shell of *Unio*.
- Describe respiratory organs of prawn.
- Draw a well labelled diagram of alimentary canal of *Pila*.

- Give an account on external features of *Sea-star*.
- Write about metamorphosis in insects.
- Write short notes on economic importance of mollusks.
- Discuss the affinities of *Balanoglossus*.

Or

Discuss the economic importance of *Apis cerana*.

Group C

Answer the following questions in detail. [4*8=32]

- Describe the cephalic and thoracic appendages of prawn.
- Describe the respiratory organs and mechanism of respiration in *pila*.
- What are various kinds of mouth parts in insects? Describe in short with necessary diagrams.
- Discuss in short about the life history and economic importance of *Sitophilus oryzae*.

Or

Describe the water vascular system of *Sea-star* and mention the significance of the system.

The End