# Mid-West University

# **Examinations Management Office**

Final Examinations-2080

Bachelor level/ B. Sc. /2<sup>nd</sup> Semester Full Marks: 60

Time: 3 hours Pass Marks:30

# Subject: Higher Non-Chordata and Hemichordata (ZOO423)

Candidates are required to give answer in their own words as far as practicable. The figures in the margin indicate full marks.

## Group A

### Answer the following questions in detail. (4x8 = 32)

- 1. Describe the cephalic appendages of prawn with labeled diagram.
- 2. Describe the various types of mouth parts in insects with the help of suitable diagram.
- 3. Explain in short, the economic importances of molluses with relevant examples.
- 4. Elaborate the water vascular system in Asterias.

#### OR

Describe, male reproductive system of Pila with necessary diagrams.

### Group B

### Answer the following questions in brief. (7x3 = 21)

- 5. Write short notes on "economic importance of arthopods".
- 6. Discuss the digestive organs of Pila.
- 7. What is nuptial flight? Mention the process and significance of nuptial flight in bees.
- 8. Highlight the structure and function of Shell in molluscs.
- 9. Describe the external features of *Balanoglossus*.

#### OR

What is pearl? How it is formed, give process?

10. Mention the characteristic features of gastropoda.

#### OR

Draw the nervous system of Pila. (no description required).

11. Give the structure and function of reproductive organs in prawn in short.

### Group C

# 12. Answer any seven questions in very short. (7x1=7)

- a. What is radula? Give its function.
- b. Mention diagnostic features of Mites.
- c. What are green glands?
- d. Mention the function of Bojanus.
- e. What is the role of statocyst?
- f. Mention the systematic position of Unio (upto order).
- g. What is holometabolic metamorphosis?
- h. What is umbo in Unio?
- i. Name the larva of Balanoglossus.

The End