

Mid-West University
Examinations Management Office

Final Examinations-2079

Bachelor level/ B.Sc / 2nd Semester

Full Marks: 60

Time: 3 hours

Pass Marks:30

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

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Answer any four questions

[4x8=32]

1. Explain various types of mouth parts found in insects.
2. Describe the structure and function of various appendages found in Prawn.
3. Explain structure, life history and economic importance of *Apis cerena*
4. Explain digestive system of *Pila* with suitable diagram.
5. Explain habit, habitat and external features of *Unio* with suitable diagram.

Group B

Answer the following questions in short (any seven)

[7x3=21]

6. Describe holometabolus metamorphosis with example.
7. Write short notes on statocyst.
8. Illustrate the lifecycle of *Sitophilus oryza*.
9. Mention various classes of phylum arthropoda with suitable examples.
10. Explain briefly the butterfly diversity of Nepal.
11. Explain briefly the Molluscan diversity of your locality.
12. Write short note on pearl formation.
13. Enlists the affinity of *Balanoglossus* with chordata.
14. Write short notes on external structures of *Asterias*

Group C

15. Answer the following questions in very short (any seven)

[7x1=7]

- a. Define pterygota and apterygota
- b. Enlist the function of Queen and worker bee in hive.
- c. Mention the mouth part found in butterfly and mosquito.
- d. What is the function of juvenile hormone in insect?
- e. Write any two features of Hemichordata.
- f. Mention the functions of tube feet found in *Asterias*.
- g. Mention the function of radula in *pila*.
- h. What do you mean by hemi-chordata?
- i. Why *Balanoglossus* is known as acornworm?

THE END