

Mid-West University
Examinations Management Office
End Semester Examination 2081

Bachelor level/ B. Sc. /5th Semester

Time: 3 hours

Subject: Evolutionary and Developmental Biology (ZOO451)

Full Marks: 60

Pass Marks: 30

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

Group A

Attempt *any four* questions.

[4x8 = 32]

1. Compare and contrast the Neo-Darwinism with Darwinism.
2. Describe macroevolution with its causes and examples.
3. Explain the types of placenta on the basis of histological structure.
4. Explain Mesozoic era with major events.
5. Describe Gastrulation in *Amphioxus*.

Group B

Answer *any seven* questions in brief.

[7x3 = 21]

6. Elaborate concept of Isolation and explain its cause.
7. Write a short note on adaptive radiation.
8. Describe the process of fertilization.
9. Write a short note on gastrulation in Rabbit.
10. Explain formation of notochord in Chick with suitable diagram.
11. How Genetics provides evidence of organic evolution? Explain.
12. Mention features of Cambrian period.
13. Explain the process of Oogenesis.

Group C

Write very short answer of the following questions (*any seven*):

[7x1 = 7]

14. What is role of genetic mutation in Microevolution?
15. Define Proterozoic eon.
16. Define Cotyledonary placenta.
17. Enlist the functions of allantois.
18. Define primitive streak.
19. Define holoblastic cleavage.
20. Enlist the significance of Microevolution.
21. What is half-life of Carbon and Uranium?
22. Write name of any two fossils found in Nepal.

The End