

Mid-West University  
**Examinations Management Office**  
End Semester Examinations 2081

Bachelor level/ B. Sc./ 5<sup>th</sup> 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 from this group:**

**(4x8=32)**

1. Describe Microevolution with its causes and examples.
2. Explain Lamarckism with suitable examples.
3. Describe formation of extra-embryonic membrane in Rabbit.
4. Describe the types of placenta on the basis of histological structure.

**OR**

Explain Mesozoic era with major events.

**Group B**

**Answer any seven questions in brief from this group:**

**(7x3=21)**

5. Explain formation of neural tube in bird.
6. Describe types of fossils on the basis of their formation.
7. Elaborate concept of Adaptive radiation.
8. Write a short note on Macroevolution?
9. Describe types of cleavage.
10. Explain structure of egg of hen.
11. How blastocyst of Rabbit is implanted? Describe.

**OR**

How natural selection plays vital role in formation of new species?

**Group C**

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

**(7x1=7)**

12. What is role of genetic mutation in evolution?
13. Write functions of allantois.
14. What is primitive streak?
15. What is half life?
16. Give any two examples of Isolecithal egg.
17. Define fertilization.
18. Define Speciation.
19. What is geographical isolation?
20. Define Modern Synthetic Theory of evolution.

**The End**