

Mid-West University  
**Examinations Management Office**  
End Semester Examinations-2080

Bachelor level/ B.Sc /6<sup>th</sup> Semester

Time: 3 hours

Subject: Comparative Anatomy and Physiology (ZOO461)

Full Marks: 100

Pass Marks: 50

*Candidates are required to give their answers as far as practicable. The figures in the margin indicate full marks.*

**GROUP A**

[10×1=10]

1. Answer any **TEN** questions in very short

- a) Define carbaminohaemoglobin.
- b) Differentiate between thick and thin skin.
- c) Define cortical and juxtamedullary nephrons.
- d) Describe cardiac cycle.
- e) What is role of Dopamine?
- f) Define diencephalon.
- g) Enlist the function of intercostal muscles.
- h) Define GFR.
- i) What is function of stratum germinativum?
- j) Differentiate between horns and antlers.
- k) Explain heart stroke in brief.
- l) Define integument.

**GROUP B**

[8×5=40]

Attempt any **EIGHT** questions in brief:

- 2) Compare heart of aves and mammals.
- 3) Explain concept of Bohr's effect.
- 4) Draw well labeled diagram of brain of fish.
- 5) Enlist the composition and function of pancreatic juice.
- 6) Describe the technique of dialysis.
- 7) Explain structure of nephron.
- 8) Write a short note on synaptic transmission.
- 9) Write short note on ctenoid scale.
- 10) What is Parkinson's disease? Write its cause and symptoms.
- 11) Describe mechanism of regulation of heart beat.

**GROUP C**

[5×10=50]

Answer any **FIVE** questions in detail.

- 12) Explain mechanism of urine formation with suitable diagram.
- 13) Describe histological structure of skin of fish.
- 14) Describe mechanism of conduction of nerve impulse.
- 15) Give an account of amphibian brain.
- 16) Give an elaborative account of epidermal derivatives of vertebrates.
- 17) Discuss the mechanism of gases transportation in human body.

**THE END**