Mid-West University

Examinations Management Office

End Semester Examinations 2081

Bachelor level/ B.Sc. / 6th Semester

Time: 3 hours

Subject: Endocrinology and Biochemistry (ZOO463)

Full Marks: 60

Pass Marks: 30

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

Group: A

Answer the following questions in detail.

 $[4 \times 8 = 32]$

- 1. Give labelled diagram of pituitary gland. List the hormones produced by adenohypophysis and neurohypophysis. Mention their functions.
- 2. What are enzymes? Discuss the chemical nature of enzymes and mechanism of enzymatic actions.
- 3. What are monosaccharides? Discuss different monosaccharides with structural formula and significances.
- 4. Where does glycolysis occur in cell? Explain the various types of glycolysis.

What is biochemistry? Discuss the importance of biochemistry in different fields with relevant examples.

Group B

Answer the following questions in brief.

 $[7 \times 3 = 21]$

- 5. Name the different groups of corticoid hormones secreted by adrenal cortex. Mention their functions.
- 6. Introduce the disease diabetes? What is the ultimate hormonal deficiencies in the diseases? How does it affect an individual's ability to use glucose?
- 7. Mention the factors affecting on enzyme activities?
- 8. Write short notes on fat soluble vitamins.
- 9. What is cholesterol? Give the chemical formula of cholesterol with its significances.
- 10. Name different food storage polysaccharides with chemical formula and their importances.
- 11. Write short notes on macro elements.

OR

"Water is essential for life." Explain.

Group C

Attempt the following questions in very short. [Any Seven]

[7×1=7]

- 12. What is acromegaly?
- 13. Mention any two differences between cretinism and myxedema.
- 14. Define the term precocious puberty.
- 15. Give a chemical reaction showing formation of peptide bond.
- 16. Show the glycosidic bond between two glucose molecules.
- 17. Give the examples of scleroproteins.
- 18. Write down the chemical formula for a triglyceride fat.
- 19. Name the disease caused by deficiency of vitamin B1.
- 20. What do you mean by denaturation of proteins?