K25FY3528 Pages: 1 Reg No:.....
Name:.....

Third Semester FYUGP Degree (Reg) Examination November 2025

KU3DSCCHE216 - BIOORGANIC CHEMISTRY

2024 Admission onwards

Time : 1.5 hours Maximum Marks : 50

Section A

Answer any 6 questions. Each carry 2 marks.

1. Draw the structure of - D glucose?
2. What are monosaccharides? Name one and give its structural formula.
3. Classify amino acids based on polarity.
4. Give two examples of purine bases.
5. What is meant by the ultrastructure of the cell wall?
6. What is meant by ash content of wood?
7. Define chirality with an illustration.
8. Why is the chair form of cyclohexane more stable than the boat form?

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Section B

Answer any 4 questions. Each carry 6 marks.

9. Explain the properties and industrial applications of hemicellulose.
10. Discuss the role of extractives in wood durability.
11. Discuss the significance of ash content analysis in wood.
12. Illustrate with diagrams the difference between enantiomers and diastereomers.
13. Analyze the effect of torsional strain in ethane and propane conformations.
14. Discuss the interconversion between chair and boat forms of cyclohexane.

Section C

Answer any 1 questions. Each carry 14 marks.

15. a)Explain the terms anomers ,epimers and mutarotation.
    b)Evaluate the structure and properties of sucrose.
16. a)Evaluate the structural features of DNA and RNA
    b)Explain Michaelis Menten theory of the mechanism of enzyme action