

5. B.Sc. Bioinformatics IIRD Yr. Sem.III

Semester III

Paper No. XIII -s

Biomolecule

★ ✓ UNIT I — Carbohydrates

❖ Functions of carbohydrates, Types, Structures and Properties of —

- Monosaccharides,
- Disaccharides,
- Polysaccharides,
- glycoconjugates
 1. Proteoglycans,
 2. Glycoproteins, and
 3. Glycolipids.

★ ✓ UNIT II - Lipids

❖ Definition of

- Alcohols and
- fatty acids,
- simple lipids,
- compound lipids,
- derived lipids.

❖ properties of fats and oils,

★ ✓ UNIT 111 Vitamins

❖ Structure and Properties of

- Fat soluble vitamins (A, D, E, K),
- Water soluble vitamins (B, 131, 132, 135, 136, B7, B9, B12, C)

★ ✓ UNIT IV - Hormones

❖ Structure, Function and role of

- Animal hormones

- (Thyroid.
- Parathyroid,
- Gonadal,
- Adrenal. and
- pancreatic),

❖ Plant hormones

- (Auxin,
- Gibberellin.
- Cytokinin,
- Absciscic acid,
- Ethylene)

★ ✓ **UNIT V Molecular fuels**

❖ **SRUCTURE AND FUCTION and role of**

- ATP,
- NADH-2
- ,NADPH-2,
- FADH-2.

★ **Reference Books:**

- ❖ Biochemistry by Stryer 5th Edition WH Freeman 2001
- ❖ Cohn & Stump, Outline of Biochemistry Wiley Eastern Ltd.2.
- ❖ Harpers Review of biochemistry Hall
- ❖ Cregnton Protein Structure & Molecular Properties
- ❖ A.L. Lehningcr, D. L. Nelson & M M Cox Principles of Biochemistry.

vikram suradkar at 10-8-2020 03:22

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❖ **Types, Structures and Properties of —**

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1. **Carbohydrates**