



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35

**Accredited by NBA-AICTE and Accredited by NAAC – UGC with A+ Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai**

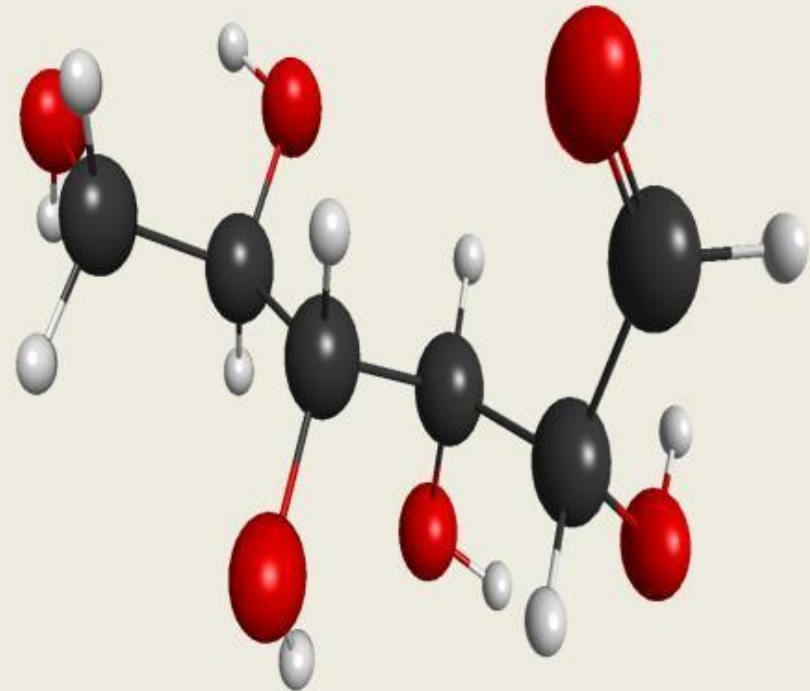
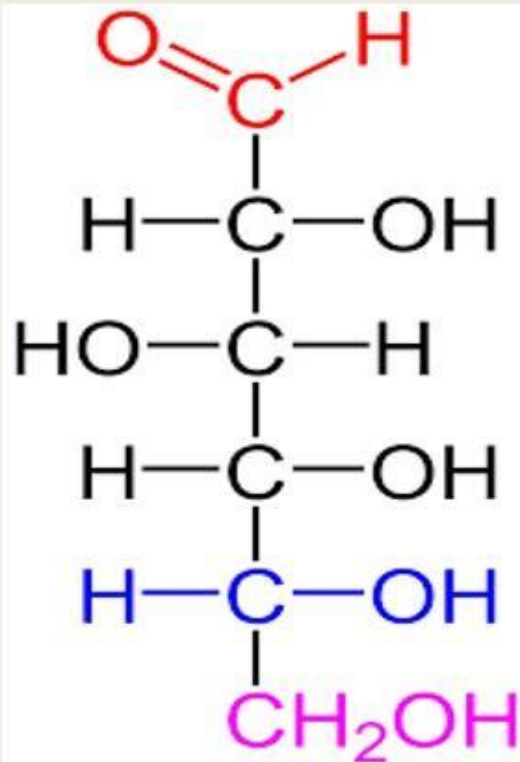


19GET277 / Biology For Engineers IV YEAR / VII SEMESTER UNIT-I: INTRODUCTION TO LIFE

General classification and important functions of carbohydrates-lipids-proteins



Carbohydrates





CARBOHYDRATES

THE MOST ABUNDANT ORGANIC MOLECULES IN NATURE

HYDRATE DE CARBON i.e. **HYDRATE OF CARBON** or

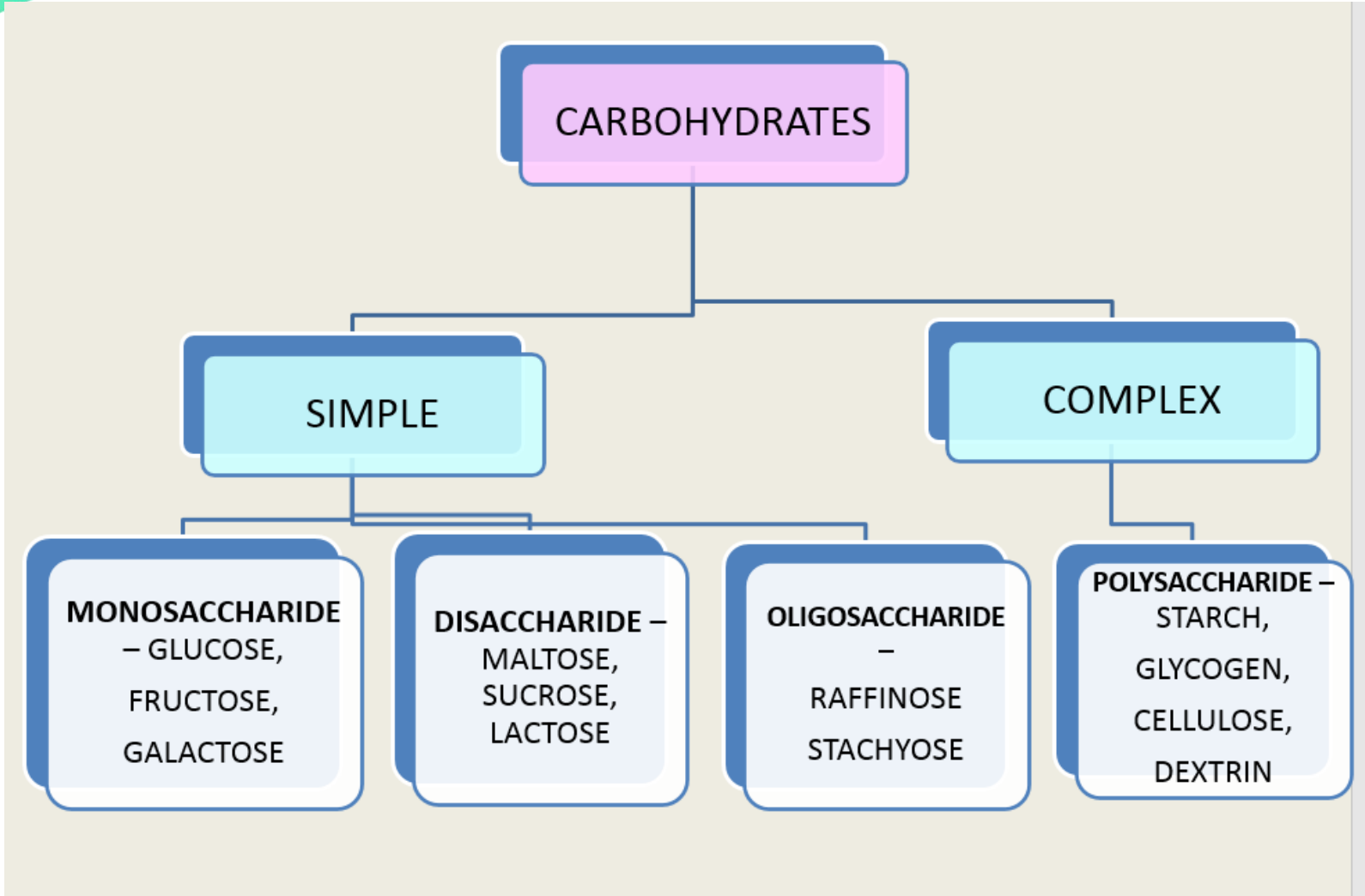


- Main source of **ENERGY**
- Provide some **STRUCTURE**
- **PRECURSORS** of many organic compounds – FATS, AMINO ACIDS
- **STORAGE FORM** of ENERGY



(Glycogen → Animals)

(Starch → Plants)





MONOSACCHARIDES

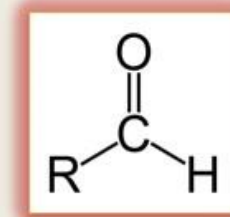
BASED ON No OF C ATOMS

- ✓ **TRIOSES** ($C_3H_6O_3$) – GLYCERALDEHYDE, DIHYDROXYACETONE
- ✓ **TETROSE** ($C_4H_8O_4$) – ERYTHROSE, THREOSE
- ✓ **PENTOSE** ($C_5H_{10}O_5$) – RIBULOSE, ARABINOSE
- ✓ **HEXOSES** ($C_6H_{12}O_6$) – GLUCOSE, FRUCTOSE, GALACTOSE
- ✓ **HEPTOSES** ($C_7H_{14}O_7$) – GLUCOHEPTOSE

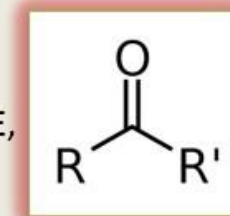
SO ON.....

BASED ON FNCTIONAL GROUP

ALDOSE – GLECEALDEHY, GLUCOSE



KETOSE – DIHYDROXYACETONE, FRUCTOSE





RECAP....



...THANK YOU