

#### SNS COLLEGE OF ENGINEERING



Kurumbapalayam (Po), Coimbatore – 641 107

#### AN AUTONOMOUS INSTITUTION

Accredited by NAAC – UGC with 'A' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

**Department of Mechanical Engineering** 

19BY701 - BIOLOGY FOR ENGINEERS

UNIT -1 | INTRODUCTION TO LIFE

**Prepared by** 

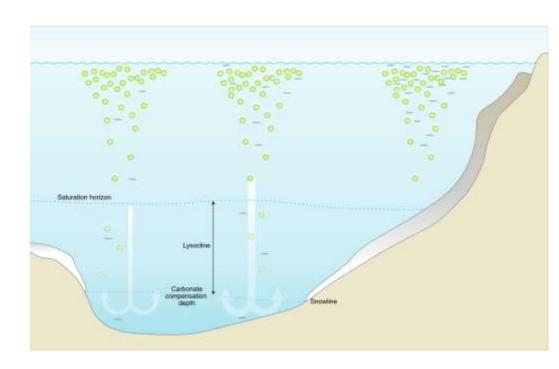
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# **FUNCTION OF CARBONATES**

- Carbonate as a ligand stabilizes transition metal complexes in uncommon high oxidation states.
- These high-valent complexes are intermediates in electrochemical water oxidation processes that are of importance in the development of new water splitting technologies.

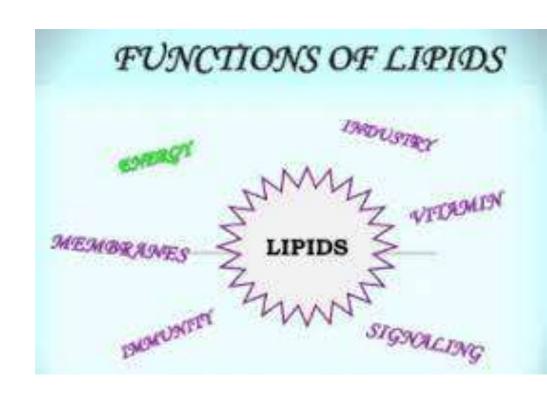






#### **FUNCTION OF LIPIDS**

- The main biological functions of lipids include storing energy, as lipids may be broken down to yield large amounts of energy.
- Lipids also form the structural components of cell membranes, and form various messengers and signaling molecules within the body.

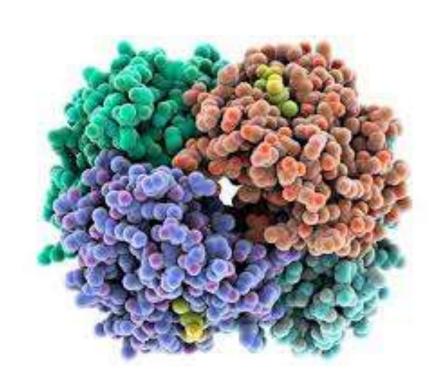






### **FUNCTION OF PROTEINS**

- Every cell in your body contains protein, so meeting your protein requirement is essential for your health.
- Building Tissues and Muscles. Protein is necessary in building and repairing body tissues.
- Hormone Production.
- Enzymes.
- Immune Function.
- Energy.







# **FUNCTION OF NUCLEIC ACID**

- Nucleic acids, deoxyribonucleic acid (DNA) and ribonucleic acid (RNA), carry genetic information which is read in cells to make the RNA and proteins by which living things function.
- The well-known structure of the DNA double helix allows this information to be copied and passed on to the next generation.

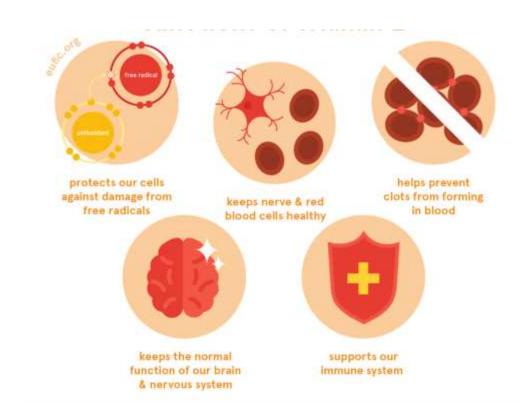






# **FUNCTION OF VITAMINS**

- Vitamins are vital for good health, but needed in much smaller amounts than macro-nutrients, like carbs and fats.
- They're important for many daily bodily functions, such as cell reproduction and growth, but most importantly for the processing of energy in cells.

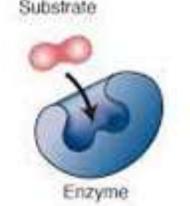


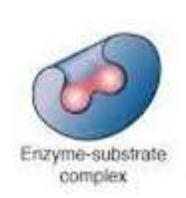


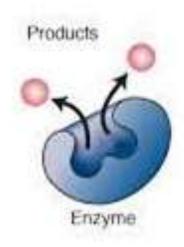


# **FUNCTION OF ENZYMES GENES**

- An enzyme is a biological catalyst and is almost always a protein. It speeds up the rate of a specific chemical reaction in the cell.
- The enzyme is not destroyed during the reaction and is used over and over.





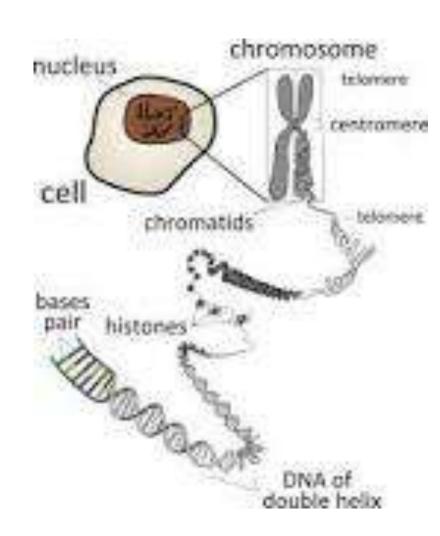






# **FUNCTION OF CHROMOSOMES**

- The main function of chromosomes is to carry the DNA and transfer the genetic information from parents to offspring.
- Chromosomes play an important role during cell division. They protect the DNA from getting tangled and damaged.





#### **ASSESSMENT**



#### Match the Following

- 1. FUNCTION OF CARBONATES
- 2. FUNCTION OF LIPIDS
- 3. FUNCTION OF PROTEINS
- 4. FUNCTION OF NUCLEIC ACID
- 5. FUNCTION OF VITAMINS
- 6. FUNCTION OF ENZYMES GENES
- 7. FUNCTION OF CHROMOSOMES

- a. carry the DNA and transfer the genetic information
- b. speeds up the rate of a specific chemical reaction
- c. processing of energy in cells
- d. carry genetic information
- e. essential for your health
- . storing energy
- g. stabilizes transition