**Assignment-2**

**Biomolecules, Polymers and Chemistry in every day life**

**Class –XII**

1. Differentiate between:
    a. Low density polythene and high density polythene
    b. DNA and RNA
    c. Nuleoside and Nucleotide
    d. Antacids and Antihistamines
    e. Disinfectants and antiseptics
    f. Agonists and antagonists
    g. Elastomers and fibres
2. Write one example each:
    a. Broad spectrum antibiotics
    b. Artificial sweetening agents
    c. Cationic detergents
    d. Essential amino acid
    e. Source of vitamin B
    f. Deficiency disease caused by vitamin C
    g. Biodegradable polymer
    h. Thermosetting polymer
3. Explain Why?
    a. Soaps do not work in hard water
    b. Aspirin though an analgesic is given to people suffering from hypertension/cardiac arrests
    c. Use of aspartame is limited to cold drinks

d. Natural rubber is vulcanized

e. Purest monomer should be used in free radical polymerization

f. Sucrose is not a reducing sugar

g. Amino acids are amphoteric in nature

h. We need to take vitamin B and C rich diet

4. Draw the Haworth projection of α-D- (+) glucose and write its reaction with HI on heating.

5. Write equation for the preparation of following polymers.

   a. Nylon 6,6

   b. PTFE

   c. Buna-S

   d. Glyptal

   e. Bakelite

6. Explain Enzyme - drug target mechanism.

7. Explain the following terms:

   a. Invert sugar

   b. Antibiotics

   c. Peptide linkage

   d. Glycogen

   e. Amylose

   f. Denaturation of proteins

   g. DNA fingerprinting

   h. Tranquillizers

8. Compare the structures of Maltose and lactose.

9. Explain the structure of proteins in detail.

10. Name the site for protein synthesis in our body.