



# Revision Chemistry

A complete Revision material for class XII as per new syllabus of NCERT



## Revision Booket-5

1. Biomolecules (4 marks)

2. Polymers (3 marks)

3. CHEMISTRY IN EVERYDAY LIFE (3 marks)

As per the previous CBSE papers from the above three chapters questions are generally very easy & direct

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## Unit 14 Biomolecules (4 marks)

1. How are carbohydrates classified on the basis of their behaviour on hydrolysis?
2. What are reducing and non reducing sugars?
3. **Write the reactions when D-Glucose reacts with following: (a) ConcHNO<sub>3</sub> (b) HI (c) Bromine**
4. **Enumerate the reactions of D-Glucose which cannot be explained by its open chain structure.**
5. How do you explain the absence of aldehyde group in the pentaacetate of D-glucose?
6. Explain the pyranose structure of Glucose
7. Explain the structure of Glucose , Fructose ,Sucrose, Maltose, Lactose
8. What are the expected products of hydrolysis of Glucose , Fructose ,Sucrose, Maltose, Lactose
9. **What do you understand by the term Anomers ,glycosidic linkage & Invert sugar?**
10. What is the basic structural difference between starch and cellulose?
11. Write two main functions of carbohydrates in plants.
12. What is glycogen? How is it different from starch?
13. **What are essential and non essential amino acids? Give two examples of each type.**
14. **Write a note on zwitter ion, Peptide linkage & Poly Peptide linkage**
15. Distinguish between the following: (a) **Fibrous & Globular proteins** (b)  $\alpha$ -helix and  $\beta$ -sheet proteins
16. **Write a note on: (a) Denaturation of proteins (b) Primary structure of proteins**
17. Define vitamins. **How are vitamins classified?**
18. Name the deficiency diseases caused & main sources of A, C, D E, B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, B<sub>12</sub> E & K.
19. Except for vitamin B<sub>12</sub>, all other vitamins of group B, should be supplied regularly in diet. Why?
20. Why cannot Vitamin C be stored in our body?
21. Define Hormones.
22. Define Enzymes. Explain the mechanism of Enzyme action
23. Define Nucleic acids. How are they classified? Mention their two important sources.
24. **Write the important differences between DNA and RNA.**
25. **What is the difference between a nucleoside and a nucleotide?**
26. What are different types of RNA found in the cell?
27. **Give the important functions & Source of following Hormones:**
  - (a) **Testosterone (androgens)**
  - (b) **Estrogens & Progesterone**
  - (c) **Cortisone**
  - (d) **Oxytocin**
  - (e) **Insulin**
  - (f) **Angiotensin**
  - (g) **Adrenaline**
  - (h) **Thyroxine**

### Unit 15 Polymers (3 marks)

1. Define the term monomer, polymer and polymerization.
2. Explain with suitable examples how polymers are classified on the basis of molecular forces.
3. **Give difference between the following:**
  - (a) **Thermoplastic polymers. & Thermosetting polymer**
  - (b) **Homopolymers and copolymer**
  - (c) **Addition & Condensation Polymerization**
  - (d) **Linear, Branched & Cross linked polymers**
  - (e) **Natural, semisynthetic & synthetic polymers**
  - (f) **Chain growth & step growth polymerization**
  - (g) **Low Density Polythene & High Density Polythene**
4. Write the name and structure of one of the common initiators used in free radical polymerization .
5. **Write the structure of monomer and polymer of (a) Polythene (b) Teflon (c) Polypropene (d) Polystyrene (e) PVC (f) Polyacrylonitrile (Orlon)**
6. Write the structure of monomer and polymer of Polybutadiene, Natural rubber & Neoprene.
7. Discuss the main purpose of vulcanization of rubber.
8. Explain the difference between Buna-S and Buna-N.
9. **Write the structure of monomer and polymer of (a) Nylon 6, 6 (b) Nylon 6. (c) Dacron (Terylene) (d) Glyptal.**
10. **What does the 6,6 means in Nylon 6, 6.**
11. **Write the structure of monomer and polymer of (a) Bakelite (b) Melamine-Formaldehyde polymer (c) Urea- Formaldehyde polymer.**
16. What do you by Biodegradable polymers? Write the structure of monomer and polymer of PHBV.
17. Explain the term copolymerization and give two examples.
18. Give at least two uses of: polythene, Teflon, Polypropene, Polystyrene, PVC Polyacrylonitrile, Natural rubber, Neoprene , Buna-S , Buna-N, Nylon 66, Nylon 6, Dacron, Glyptal, Bakelite Melamine-Formaldehyde polymer, PHBV , Urea-Formaldehyde polymer.

### Unit 16 CHEMISTRY IN EVERYDAY LIFE (3 marks)

1. **Define the following with examples: chemotherapy Analgesics (Narcotics & Non narcotics ) , Antipyretic Tranquilizers, Antimicrobials Antiseptics, Disinfectants Antibiotic (Broad & narrow spectrum antibiotic) Antihistamines, Antacids, Antifertility drugs.**
2. **Define the following terms giving suitable examples: Artificial sweetening agents, Food Preservatives, Antioxidants**
3. **Explain the following Detergents with suitable examples: Soap, Detergents Cationic detergents, Anionic detergents, Non-ionic detergents**
4. What may be added to soap to improve its antiseptic properties.
5. What are the Constituents of dettol?
6. What is tincture of iodine? What is its use?
7. Why is the use of aspartame limited to cold drinks and foods?
8. Why do we required artificial sweetening agent?
9. What problem arises in using alitame as artificial sweetener?
10. Why soaps do not works in hard water. Can you use soaps and synthetic detergents to check the hardness of water?
11. Synthetic detergents are preferred to soaps in washing machines. State reason.
12. What are biodegradable and non-biodegradable detergents? Give one example of each.