

BHARATIYA VIDYA BHAVAN'S V M PUBLIC SCHOOL, VADODARA
QUESTION BANK

CHAPTER-4 CARBON AND ITS COMPOUNDS Section A

- Q1. What is the next homologous of C_3H_7OH called?
- Q2. What is the molecular formula of the alcohol which can be derived from propane?
- Q3. What is meant by the term functional group?
- Q4. Which functional groups always occur at the terminal position of carbon chain?
- Q5. Name a functional group which always occurs in middle of carbon chain.
- Q6. Name the simplest ketone?
- Q7. Why is pure ethanoic acid called glacial ethanoic acid?
- Q8. What is vinegar?
- Q9. Give the name and chemical formula of the simplest organic acid?
- Q10. What is Isomerism?

Section- B

- Q1. How is ethanol obtained for commercial use?
- Q2. Write physical properties of ethanol?
- Q3. Name the gas evolved when acetic acid reacts with acetate ion? How would you identify this gas.
- Q4. Write four uses of ethyl alcohol?
- Q5. Write four harmful effects of drinking alcohol.
- Q6. Mention the physical properties of acetic acid.
- Q7. What is meant by denatured alcohol? Why is the need to denature?
- Q8. Why are unsaturated hydro-carbons more reactive than saturated hydro-carbon?
- Q9. What is a covalent bond? What type of bond exists in :-
- a) CCl_4
- b) $CaCl_2$

Q10. How will you convert ethanoic acid into methane? Explain with the help of the reactions involved?

Section- C

Q1. Give an example of :-

- a) Open chained compound
- b) Branched chain compound
- c) Ring

Q2. Why the reaction between methane and chlorine is considered a substitution reaction?

Q3. Write molecular, structural and electronic formula of ethane?

Q4. Draw the structure of butanoic acid?

Q5. What is detergent? Name one detergent?

Q6. Intake of small quantity of methanol can be lethal. Comment?

Q7. A gas is evolved when ethanol reacts with sodium. Name the gas evolved and write the reaction involved?

Q8. What is soap? Why soap is not suitable for washing clothes in hard water?

Q9. Draw the electronic dot structure of ethyne and also draw its structure?

Q10. Why are soaps better than detergents for washing clothes?

Section- D

Q1. A) What are hydrocarbons? Give examples

B) Give the structural differences between saturated and unsaturated hydrocarbons with two examples?

C) What is a functional group? Give four examples of functional groups?

Q2. Explain the given reactions with a suitable example.

- a) Hydrogenation reaction
- b) Oxidation reaction

- c) Substitution reaction
- d) Saponification reaction
- e) Combustion reaction.