

Lesson: 10 Types of Chemical reactions:

Important 2 Marks Questions:

- ① Define Combination reaction. Give one example for an exothermic combination reaction. ✖
- ② Differentiate reversible and irreversible reactions. ✖
- ③ Which of the metals displaces hydrogen gas from HCl? Silver or zinc? Give the chemical equation of the reaction and justify your answer.
- ④ (i) $2\text{NaCl (aq)} + \text{F}_2 \text{ (g)} \rightarrow 2\text{NaF (aq)} + \text{Cl}_2 \text{ (g)}$
 (ii) $2\text{NaF (aq)} + \text{Cl}_2 \text{ (g)} \rightarrow 2\text{NaCl (aq)} + \text{F}_2 \text{ (g)}$
 Which of the above two reactions possible to occur? why? Explain the reasons.
- ⑤ Differentiate Combination reactions and decomposition reactions.
- ⑥ a) Define: Ionic product of water. ✖
 b) Write the mathematical expressions of ionic product of water, its unit, also its value.
- ⑦ Book Back Hot Qns: VII, 1, 2 Qns. ✖
- ⑧ Solved pH - problems 10.7, 10.8 All sums (refer). ✖
- ⑨ Book Back Qns: VIII Solve the following problems:
 Questions: 1, 2, 3, 4 ✖
- ⑩ What is Combustion reaction? Give one example equation.
- ⑪ Explain the single displacement reactions with suitable reactions. Book back Qns: V ①, 2 - Qns: (2 Marks)

Important 4 and 7 Marks Questions:

- ① What is decomposition reactions? Explain the types of decomposition reactions with examples. ✖
- ② Explain the types of double displacement reactions with examples. ✖
- ③ Explain the factors influencing the rate of a reaction. ✖
- ④ How does pH play an important role in everyday life? ✖
- ⑤ What is a chemical equilibrium? What are its characteristics?
- ⑥ a) What is combination reactions? ✖
b) Explain the various types of combinations with suitable reactions.

Prepared By

M. Abbas Manthru

B.Sc, B.Ed, M.A, M.Phil,

B.G. Asst (Science)

Elaku High School - Cumbur.

Theni dt.

Unit: II. Carbon and its Compounds.

- ① a) Name the simplest ketone and give its structural formula. \times
 b) The general molecular formula of alkynes is _____
 c) The general molecular formula of Alkanes is _____
- ② Clarify the following compounds based on - the pattern of carbon chain and give their structural formula.
 (i) Propane (ii) Benzene (iii) Cyclobutane (iv) Furan. \times
- ③ How is ethanoic acid prepared from ethanol? Give the chemical equation. \times
- ④ How do detergents cause water pollution? suggest remedial measures to prevent this pollution.
- ⑤ Differentiate Soaps and detergents \times
- ⑥ Write the uses of Ethanoic acid. \times
- ⑦ Match the following:
- | <u>Compound</u> | <u>functional group.</u> |
|---------------------|--------------------------------------------------------|
| i) Alcohol | - $\overset{\text{O}}{\parallel} \text{C} - \text{OH}$ |
| ii) Aldehyde | - $\overset{\text{O}}{\parallel} \text{C} -$ |
| iii) Ketone | - $\overset{\text{O}}{\parallel} \text{C} - \text{H}$ |
| iv) Carboxylic acid | - $-\text{OH}$ |
- ⑧ Write the uses of Ethanol \times \rightarrow (Basic basic Qns: VII - 2nd Qns same) with suitable reaction!
- ⑨ Explain the Esterification reaction
- ⑩ Write the IUPAC Names of the following compound.
- a) CH_3CHO (b) $\text{CH}_3\text{CH}_2\text{COCH}_3$ (c) $\text{ClCH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$
 d) CH_3COOH (e) $\text{CH}_2\text{CH}_2\text{OH}$ (f) $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$

a) What is hydrocarbon?

- ⑪) Write any 4 points of characteristics of hydrocarbon. ✘
- ⑫) How to test, identify saturated and unsaturated compounds?
- ⑬) a) write physical properties of ethanol.
b) write physical properties of ethanoic acid.
- ⑭) a) Advantages of detergents over soaps? ✘
b) write the disadvantages of detergents?

II important, 4, 7 Marks Questions:

- ① What is called homologous series? Give any three of its characteristics? ✘
- ② Arrive at, systematically, the IUPAC name of the following compounds.
- a) $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{OH}$ (b) $\text{CH}_3 - \overset{\text{CH}_3}{\underset{\text{CH}_2}{\text{C}}} - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$
- c) $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH} = \text{CH}_2$.
- ③ How is ethanol manufactured from sugarcane? ✘
- ④ Explain the mechanism of cleansing action of soap!

Missing Qns:

- 5 Explain the mechanism of cleansing action of soap.
- 6 Explain the IUPAC rules for naming organic compounds.
- 7 Write the applications of organic compounds in daily life. * (2M or 4M ans)
- 8 Ethanol chemical properties: *
- (i) Dehydration (ii) Reaction with sodium.
 (iii) Oxidation (iv) Dehydrogenation. *
- 9 Ethanoic Acid ^{chemical} properties:
- (i) Reaction with metal (ii) Reaction with Na_2CO_3 and NaHCO_3 (iii) Reaction with NaOH
 (iv) Decarboxylation reaction.
- 10 Book back Qns: Hot Questions:
 (vii) ①, ② ans. *
- 11 Write the chemical formula and structure of Ethanol and Ethanoic acid. *

Prepared By

M. Abbas Manthiri

B.sc, B.ed, M.A.M.phil

B.T. Assistant

Science

Ilahi Oriental Arabic high school

Cumbum _ Theni dt

More Materials Search //

ilahi high school YouTube Channel