

DPP

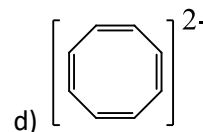
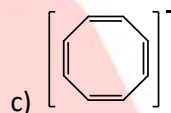
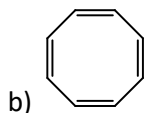
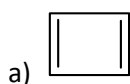
DAILY PRACTICE PROBLEMS

CLASS : XIIth
DATE :

SUBJECT : CHEMISTRY
DPP NO. : 3

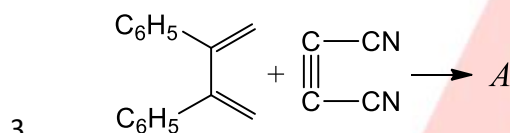
Topic :-HYDROCARBONS

1. Which among the following is aromatic?

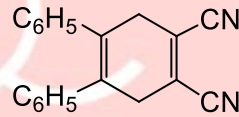
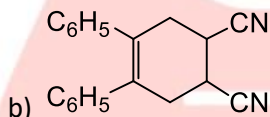
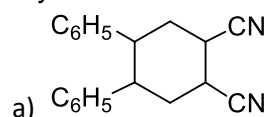


2. The neutral wax called Ozokerite found near petroleum well is a mixture of:

- a) Solid halides b) Solid hydrocarbons c) Solid alcohols d) None of these



Identify A:



d) None of these

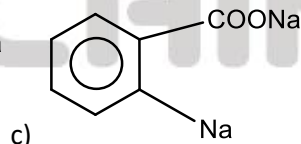
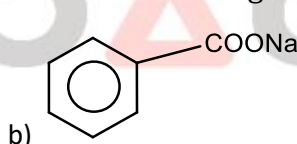
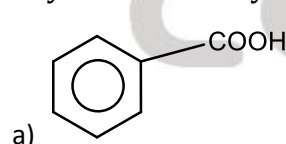
4. Which among the following are used as catalyst in cracking?

- a) Oxides of Al b) Oxides of Cr, Mo c) Oxides of V d) All of these

5. The general formula of a cycloalkane is

- a) C_nH_n b) C_nH_{2n} c) C_nH_{2n-2} d) C_nH_{2n+2}

6. Toluene reacts, with excess of Cl_2 in presence of sunlight to give a product, which on hydrolysis followed by reaction with NaOH gives



d) None of these

7. Which of the following alkanes can be easily sulphonated?

- a) *n*-butane b) Isobutene c) *n*-pentane d) *n*-hexane

8. When propionic acid is treated with aqueous sodium bicarbonate, CO_2 is liberated. The 'C' of CO_2 comes from:

- a) Methyl group b) Carboxylic group c) Methylene group d) Bicarbonate

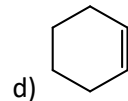
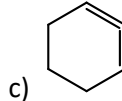
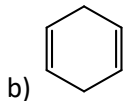
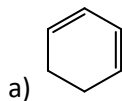
9. 10mL of a certain hydrocarbon require 25mL of oxygen for complete combustion and the volume of



CO₂ produced is 20mL. what is the formula of hydrocarbon?

- a) C₂H₂ b) C₂H₄ c) CH₄ d) C₂H₆

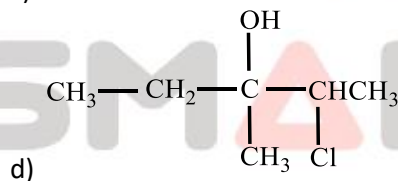
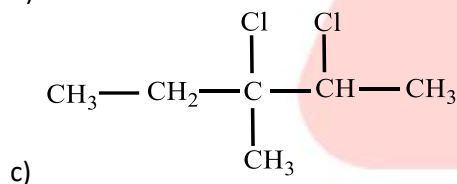
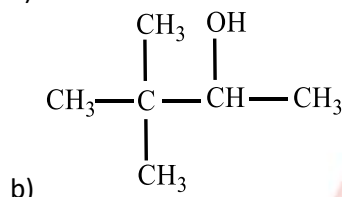
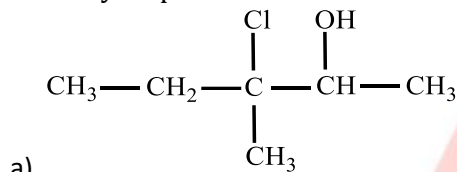
10. Which of the following compounds is the most stable?



11. The octane number of any fuel increases with:

- a) Increase in *n*-heptane
b) Decrease in 2,2,4-trimethylpentane
c) Increase in 2,2,4-trimethylpentane
d) None of the above

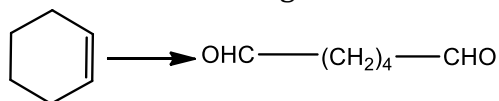
12. 3-methyl-2-pentene on reaction with HOCl gives:



13. The reaction of propene with HOCl proceeds *via* the addition of

- a) Cl⁺ and OH⁻ in a single step b) Cl⁺ in the first step
c) H⁺ in the first step d) OH⁻ in the first step

14. Select the reagent for the following reaction,



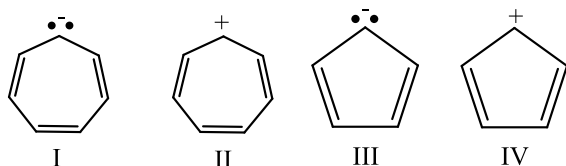
- a) SeO₂ b) O₃, Zn/H₂O
c) O₃, H₂O₂ - CH₃COOH d) PCC

15. The chemical reactivity of ethylene is due to:

- a) Short carbon to carbon bond distance
b) High double bond energy

- c) Trigonal planar structure
- d) Presence of π -electrons

16. Which of the following species could be expected to exhibit aromatic character?



Select the correct answer from the following

- a) I and IV
 - b) II and IV
 - c) I and III
 - d) II and III
17. Product formed when 1-butene is subjected to HBr in the presence of peroxide:
 a) 1-bromobutane b) 2-bromobutane c) 1,1-dibromobutane d) 1,2-dibromobutane
18. Nitrobenzene can be prepared from benzene by using a mixture of concentrated HNO_3 and concentrated H_2SO_4 . In the nitrating mixture, HNO_3 acts as
 a) Base b) Acid c) Reducing agent d) Catalyst
19. In the reaction sequence,
 $\text{CH}_3\text{CH}=\text{CH}_2 \xrightarrow[\text{(ii)H}_2\text{O/Zn}]{\text{(i)O}_3} \text{Products}$ Products will be
 a) CH_3COCH_3 b) $\text{CH}_3\text{COCH}_2\text{OH}$
 c) $\text{CH}_3\text{COOH} + \text{HCOOH}$ d) $\text{CH}_3\text{CHO} + \text{HCHO}$
20. Petrol or gasoline used as an automobile fuel is a mixture of:
 a) Hydrocarbons
 b) Alcohols
 c) Carbohydrates
 d) Hydrocarbons and alcohols