

DEPARTMENT OF GENERAL EDUCATION
DIET ERNAKULAM
VAIBHAVAM 2021
SSLC ACADEMIC SUPPORT

CHEMISTRY TEST 3
UNIT – 5, 6, 7

Time : 45 minutes
Score: 20

Instructions

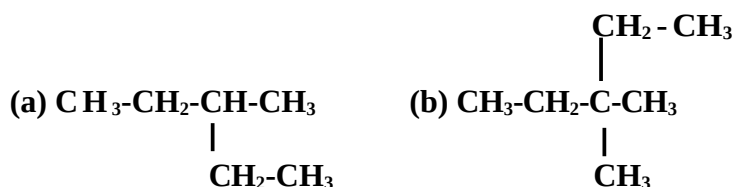
Total score in the question paper is 30. Answers of best written questions/sub questions, for 20 score, are evaluated.

Question number 1 – 3: (1 score for each question)

1. Write the name of the drying agent used in the production of ammonia.
2. Identify alkene from the given compounds.
 C_2H_2 , C_2H_6 , C_2H_4
3. Which is the catalyst used in Contact process ?

Question number 4 – 6: (2 score for each question)

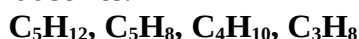
4. Write the number of carbon atoms in the main chain of the following compounds.



5. Which property of H_2SO_4 is shown in the following situations.

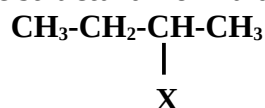
- a) During the preparation of chlorine, the gas is passed through concentrated H_2SO_4 .
- b) Wooden cupboards appeared to be burnt, when concentrated H_2SO_4 happened to fall on it.

6. Select the members of a homologous series from the following and write the general formula of that series.



Question number 7 – 9: (3 score for each question)

7. The structural formula of an organic compound is given below.



Write the IUPAC name of the compounds obtained when 'X' is replaced by
(a) -Cl, (b) -OH, (c) - CH_3

8. Acetic acid is a carboxylic acid which is used in our daily life .

(a) 100 % of acetic acid is known as-----

(b) What is Vinegar?

(c) Write one use of vinegar in our daily life.



This reversible reaction is in equilibrium. What happens to the amount of products under the following conditions .

(a) 'C' is removed from the system

(b) temperature is increased

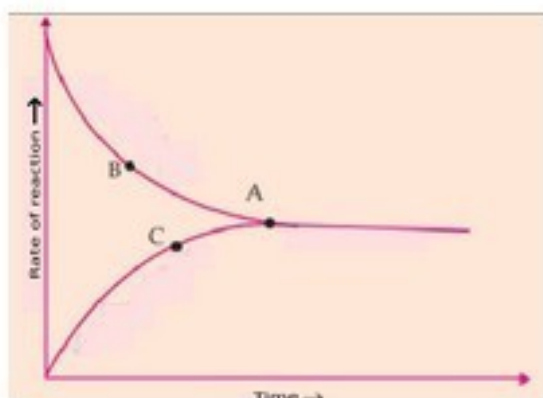
(c) a suitable catalyst is added

Question number 10 – 12: (4 score for each question)

10. Fill in the blanks.

Reactants	Products	Name of the reaction
$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_3$	$\text{CH}_3\text{-CH}_3 + \underline{\text{a}}$	Thermal cracking
$\text{CH}_2=\text{CH}_2 + \text{H}_2$	$\text{CH}_3\text{-CH}_3$	<u> b </u>
<u> c </u> + Cl_2	$\text{CH}_3\text{-Cl} + \text{HCl}$	Substitution reaction
$n\text{CH}_2=\text{CH}_2$	$[-\text{CH}_2\text{-CH}_2-]_n$	<u> d </u>

11. The graph showing the progress of the reaction $\text{N}_2 + 3\text{H}_2 \rightleftharpoons 2\text{NH}_3 + \text{heat}$ is given



a) Identify the reactions represented by B and C?

b) What is the significance of the stage A?

c) Is there any change in the concentration as time passes after attaining the stage A?

12. IUPAC names of some organic compounds are given below

(i) Butane, (ii) methoxy ethane (iii) 2-methyl propane (iv) propan -1-ol.

(a) Write the structural formula of the above compounds.

(b) Find out the chain isomers from the above.