


تجميعات 2020 :

نشاط الفاينل

CHEMISTRY

ريهان و ود و  E\_Stargazing و JR\_12

دعواتكم 

## ملاحظة :

الأسئلة يختلف ترتيبها و  
ترتيب الاختيارات لذلك  
ركزوا وانتوا تحلوها .

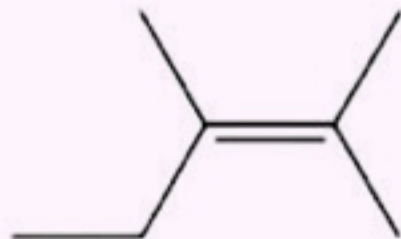
..... are compounds that have at least one benzene ring in their structures.

- aromatic hydrocarbons
- carboxylic acids
- isomers
- cycloalkanes

A

**Question No. 20**

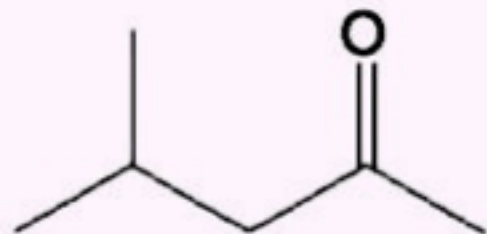
Give the IUPAC name for the following organic compound:



- 2,3-dimethylpentane
- 2-ethyl-3-methyl-2-butene
- 2,3-dimethyl-2-pentene
- 3,4-dimethyl-3-pentene



What is the family of the following organic compound?



- carboxylic acids
- esters
- aldehydes
- ketones



Which of the following pairs is NOT a conjugate acid-base pair?

- $\text{H}_2\text{SO}_4/\text{SO}_4^{2-}$
- $\text{H}_2\text{SO}_4/\text{HSO}_4^-$
- $\text{H}_2\text{O}/\text{OH}^-$
- $\text{HSO}_4^-/\text{SO}_4^{2-}$

A

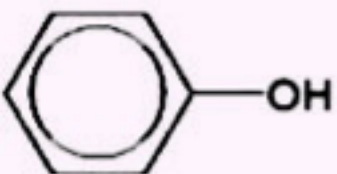
What is the effect of **increasing** the temperature on the following exothermic reaction?



- no effect will be observed
- the concentration of  $\text{Ca(OH)}_2$  will decrease
- the reaction will shift forward
- the reaction will shift reverse



What is the common name of the following compound?

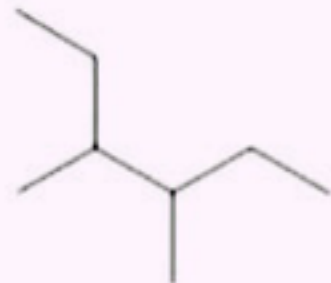


- Phenol
- Aniline
- Toluene
- Benzene

A



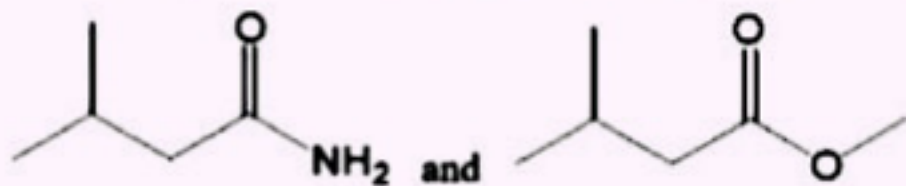
Choose the correct systematic name for the following compound:



- 3,4-dimethylpentane
- 4-ethy-3-methylpentane
- 3,4-dimethylhexane
- 2-ethy-3-methylpentane



To which organic families do the two following compounds belong, respectively?



- amide and carboxylic acid
- amide and ester
- amine and carboxylic acid
- amine and ester

B

**Question No. 19**

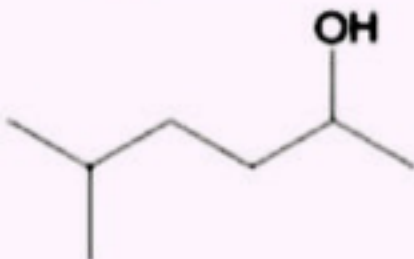
The general formula for alkenes is .....

- $C_nH_{2n-2}$
- $C_nH_n$
- $C_nH_{2n}$
- $C_nH_{2n+2}$



Question No. 8

Choose the correct name of the following alcohol and its class.



- 5-methyl-2-hexanol; tertiary alcohol
- 2-methyl-5-hexanol; secondary alcohol
- 5-methyl-2-hexanol; secondary alcohol
- 5-methyl-2-hexanol; primary alcohol



**Question No. 4**

The compound HF is .....

- an ionic compound
- a weak acid
- a strong acid
- a weak base

B

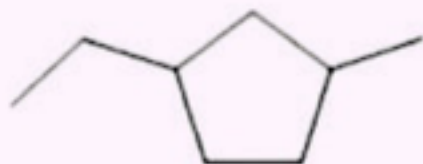
Question No. 6

Calculate is the pH of a solution that has  $[H_3O^+] = 4.16 \times 10^{-3} M$ .

- 3
- 2.38
- 4.16
- 11.62

B

Choose the correct systematic name for the following compound:



- 1-ethyl-3-methylcyclobutane
- 1-ethyl-4-methylcyclopentane
- 3-ethyl-1-methylcyclopentane
- 1-ethyl-3-methylcyclopentane



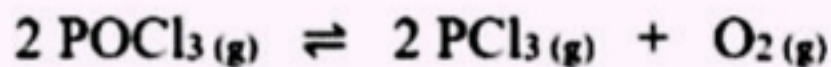
What is the  $[\text{OH}^-]$  in a solution that has a  $[\text{H}_3\text{O}^+] = 1.0 \times 10^{-5} \text{ M}$ ?

- $1.0 \times 10^{-9} \text{ M}$
- $1.0 \times 10^{-8} \text{ M}$
- $1.0 \times 10^{-3} \text{ M}$
- $1.0 \times 10^{-6} \text{ M}$

A



Choose the correct expression for equilibrium constant,  $K_{eq}$ , for the following reaction:



- $K_{eq} = \frac{[\text{POCl}_3]}{[\text{PCl}_3][\text{O}_2]}$
- $K_{eq} = \frac{[\text{POCl}_3]^2}{[\text{PCl}_3]^2 [\text{O}_2]}$
- $K_{eq} = \frac{[\text{PCl}_3][\text{O}_2]}{[\text{POCl}_3]}$
- $K_{eq} = \frac{[\text{PCl}_3]^2 [\text{O}_2]}{[\text{POCl}_3]^2}$



Which of the following suffixes refers to an organic compound that includes a  $C\equiv C$ ?

- one
- yne
- ane
- ene

13

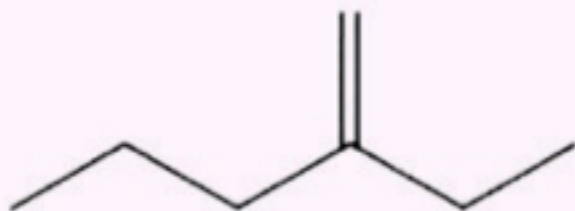
Question No. 9

Which of the following is a Lewis acid?

- $F^-$
- $H_2O$
- $NH_3$
- $CO_2$



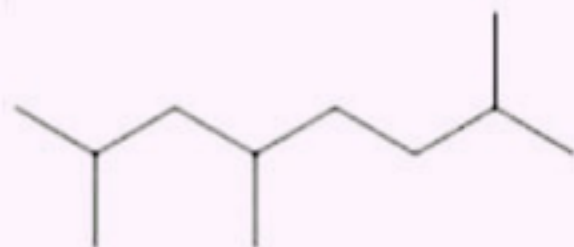
Give the IUPAC name for the following organic compound:



- 3-ethyl-1-hexene
- 3-heptene
- 2-ethyl-1-pentene
- 2-methyl-3-hexene



Choose the correct systematic name for the following compound:

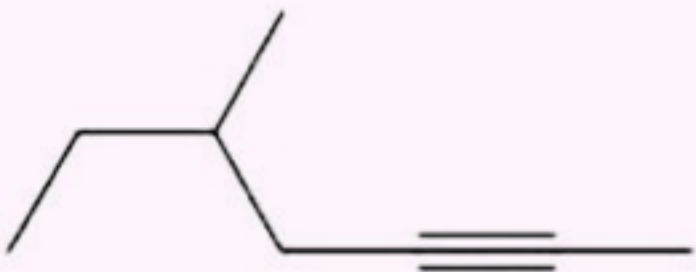


- 2,4,8-trimethylnonane
- 2,4,6-trimethylheptane
- 2,5,7-trimethyloctane
- 2,4,7-trimethyloctane



**Question No. 7**

Give the IUPAC name for the following organic compound:



- 5-methyl-2-hexyne
- 3-methyl-1-pentyne
- 5-methyl-2-heptyne
- 3-methyl-5-heptyne

