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GEOLOGY

SCIENCES

CHM 102 ASSIGNMENT.

1.

A. $C_6H_5C=O$, $C_6H_5-CH_2CH_2$

B. Importance of organic compounds are;

- they serve as the basis of all carbon-based life on earth
- create energy production in biological life
- cause atmospheric depletion and release hydrocarbon energy
- have versatile bonding patterns and are part of all organisms

C. Difference between homocyclic and heterocyclic compounds;

- homocyclic compound ring contains only one type of atom while heterocyclic compound ring contains at least two different types of atoms including carbon

- homocyclic compounds have 100% carbon atoms in their rings while heterocyclic compounds have mainly carbon and in addition, hetero-atoms are found in their ring

A.

B. Aldehydes.

C. It's a test for qualitatively detecting the carbonyl functionality of a ketone or aldehyde functional group.

D. Functional groups and examples;

-OH; methanol, alkanols

-CHO; methanal,

-F, -Cl, -Br, -I; methane, bromide

-NH₂; acetamide, methylamine

-COH; alkanol,

-O-; dimethyl ether, methyl ethyl ether

-SH; methyl ethyl sulfide, diethyl sulfide