**ASADU CHUKWUEBUKA FABIAN**

**MECHANICAL ENGINEERING**

**17/ENG06/012**

1. Pentanoic Acid

b. Organic chemistry is important as it is the basic building blocks of all organic matter and all living organisms.

c. Homocyclic compounds are compounds that all the ring atoms are the same but a **heterocyclic compound** or ring structure is a cyclic **compound** that has atoms of at least two different elements as members of its ring.

2.(8.9/12.2)+(2.44/12.2)+(5.6/12.2)

=0.73+0.2+0.46

=1.39

b.A is an aldehyde

B is an Alkene

c. It is used to qualitatively detect the carbonyl functionality of a ketone or aldehyde functional group.

d.

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| Functional Group | Example |
| Alkanes | Methane, Ethane |
| Alkenes | Methene, Ethene |
| Alcohols | Methanol, Ethanol |
| Alkynes | Methyne, Ethyne |
| Alkyl Halides | Bromoethane, 1,2 DichloroEthane |
| Carboxylic acids | Methanoic acid, Ethanoic acids |
| Esters | methyl ethanoate, ethyl ethanoate |