

JAMES EVIDENCE

19/ENG06/049

MECHANICAL ENGINEERING

CHM 102

QUESTION 1

A. cis-1,2-dibromoethene

B. important of organic compounds

•Organic compounds play an important role in our daily activities. There is hardly any walk of life where we do not need the organic compounds. The food that we eat is essentially a mixture of organic compounds. The changes which the food undergoes in our bodies are organic chemical reactions. The clothes that we wear whether of cotton or synthetic fiber all are organic in character. The soap, cosmetics, perfume, oils, plastics, explosives, rubber, dyestuffs, paper, insecticides, etc., are all organic compounds. In the medicinal field, organic compounds are indispensable. Antibiotics, sulpha drugs, alkaloids, aspirin, iodoform, etc., are organic compounds. There is hardly any industry which is not dependent on organic compounds. The following list clearly illustrates the importance of organic compounds.

1. Food: Carbohydrate, Proteins, Fats, vitamins, Enzymes, etc.

2. Clothes: - Cotton, Silk, Wool, Nylon, Rayon, Dacron, etc.

3. Fuels: - coal, Wood, Natural gas, Petrol, etc.

4. Medicines: - Penicillin, Streptomycin, Chloromycetin, Sulphadiazine, Morphine, Aspirin, Iodoform, Cocaine, etc.

5. Explosives: - Nitroglycerine, Nitrocellulose, T.N.B, T. N.T, etc.

6. Dyes: - Indigo, Malachite green, Alizarin, etc.

7. Insecticides: - D.D.T, Gammexane, Malathion, etc.

8. Household and other common articles:- soaps, Cosmetics, Perfumes, Detergents, paper, Rubber, Plastics, Leather, Resins, Inks, Paints, Varnishes, Photographic films, etc. 8 years ago organic compounds are used every where 6 years ago WESE THEY ARE VERY MUCH USEFUL...BUT OF NO USE WHEN ASKED IN EXAMS

C.WHAT ARE THE DIFFERENCE BETWEEN HOMOCYCLIC AND HETEROCYCLIC.

•Homocyclic vs Heterocyclic Compounds

1.Homocyclic Compound ring contains only one types of atom WHY Heterocyclic Compound ring contains at least two different types of atoms including carbon.

2.Homocyclic Compounds have 100 carbon atoms in their ring WHY Heterocyclic Compounds have mainly carbon and, in addition, heteroatoms such as nitrogen, oxygen, and sulphur are found in their ring.

3. Alicyclic homocyclic and Aromatic homocyclic WHY Alicyclic heterocyclic and Aromatic heterocyclic

4. Phenol, Toluene, Naphthalene, and Anthracene WHY Tetrahydrofuran, Piperidine, Pyridine, Furan, and Pyrrole

Question 2

B. 1.Aldehyde

2.Alkene

C. For detecting ketones and aldehydes

D. alkane e.g $\text{CH}_3\text{CH}_2\text{CH}_3$ (propane)

alkene e.g $\text{CH}_3\text{CH}=\text{CH}_2$ (propene)

alkyne e.g $\text{CH}_3\text{C}\equiv\text{CH}$ (propyne)

alkyl halide e.g CH_3Br (methyl bromide)

alcohol e.g $\text{CH}_3\text{CH}_2\text{OH}$ (ethanol)

ether e.g CH_3OCH_3 (dimethyl ether)

amine e.g CH_3NH_2 (methyl amine)

