Engineering Chemistry (BAS102)

Assignment -1

1. Draw a Molecular orbital diagram of CO and CO^+, and explain the values of bond length for both molecules.
2. Explain Carbon Nano Tube and SPIONS giving structure and applications.
3. Elaborate classification and applications of liquid crystals.
4. Draw a Molecular orbital diagram of N_2, N_2^- and N_2^+, and arrange their bond lengths in ascending order.
5. Draw a Molecular orbital diagram of O_2 and on the basis of the diagram prove that Oxygen is paramagnetic in nature.
6. Explain the Buckminster fullerene providing the structure and properties.
7. Explain the Graphite providing the structure and properties.
8. Explain the 12 principles of Green Chemistry.
9. Give the green synthesis of Paracetamol and Adipic Acid.
10. Draw a Molecular orbital diagram of NO and HF and give their bond order and Magnetic behaviour.