

B.Sc DEGREE EXAMINATION, EVEN SEMESTER 2021
II Year III Semester
Allied Chemistry-I

Max.marks :25

Answer any **FIVE** questions ($5 \times 5 = 25$) Marks

1. Analyse the MO diagram of O_2 molecule and explain the bonding and anti-bonding orbitals in the molecule.
2. Describe the various heat treatment processes.
3. Explain Carnot cycle and deduce an expression for efficiency of heat engine.
4. Describe the principle and applications of paper chromatography.
5. Discuss the hybridisation and geometry in acetylene molecule.
6. Elucidate the structure of naphthalene with Haworth synthesis.
7. Explain the preparation and hybridisation of IF_7