

Unit-I (Atomic Structure)

I. ~~choose~~ the One marks: $(5 \times 1 = 5)$

1. de-broglie equation
2. The hybridisation of IF_7 molecule.....
3. The bond. order of Nitrogen molecule.....
4. Intra molecular H-bonding present in
5. ~~State~~ Dual character is explained by

II 3marks $(5 \times 3 = 15)$

1. State Heisenberg's uncertainty principle.
2. Define Hybridisation.
3. Define bond order.
4. Define Molecular orbitals.
5. Write significance of negative electron energy.

III 5marks $6 \times 5 = 30$.

1. De-broglie equation.
2. Postulates of molecular orbital theory.
3. Energy level diagram of N_2 molecule Explain.
4. Energy level diagram of O_2 molecule Explain.
5. Davison germer experiment Explain.
6. Importance of Hydrogen bonding.