

CHEMISTRY

MID EXAMINATION

DATE:15-03-2025

MAX MARKS:30

ANSWER THE FOLLOWING QUESTIONS

1. A) Explain Schrodinger wave equation and Discuss about significance of Ψ and Ψ^2 in quantum mechanics? (5M)

B) Explain bonding in homo and Draw the molecular orbital diagram of N_2 and explain the magnetic nature and bond order?(5M)

2. A) Discuss particles in one dimensional potential box with a suitable example?(5M)

B)Draw the π molecular orbitals of benzene?(5M)

3. A) Explain basic principles of semiconducting materials?(5M)

B)Write an account on carbon nano tubes with types and it's applications?(5M)

(OR)

4. A) What are super capacitors? How they are classified?(5M)

B)What are the important engineering applications of semi-conducting materials?(5M)