

# **VIVA VOCE QUESTIONS**

## **B.Sc. Physics – 5th Semester (Quantum Mechanics)**

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## **Experiment 1: Hydrogen Atom**

1. What is the Schrödinger equation?
2. Why is hydrogen atom treated as a central force problem?
3. What is meant by s-wave solution?
4. Why is ground state energy negative?

## **Experiment 2: Screened Coulomb Potential**

1. What is screened Coulomb potential?
2. What is the role of screening parameter?
3. Why numerical solution is required?

## **Experiment 3: Anharmonic Potential**

1. What is anharmonic oscillator?
2. Why anharmonic terms are important in real systems?

## **Experiment 4: Morse Potential**

1. What is Morse potential?
2. Why is Morse potential suitable for molecular vibration?