## ASSIGNMENT

Name of the Paper: Thermal Physics Name of Course: B. Sc. (H) Physics

Semester: III

Submission Date: 17/10/2023 (9:00AM)

Maximum Marks: 12

## **Instruction for Candidates**

1. Question No. 1 to 5 for Roll No. 22/19001 to 22/19030.

Question No. 6 to 10 for Roll No. 22/19031 to 22/19060.

## Explain:

- Deviation from the ideal gas equation.
- Andrew's Experiments on CO<sub>2</sub> gas.
- 3. Virial equation.
- 4. Continuity of liquid and gaseous states.
- 5. Boyle temperature.
- 6. Van der waals equation of state for real gases.
- 7. Comparison with experimental curves: P-V diagrams.
- 8. Value of critical constants.
- Law of corresponding states.

10. Free Adiabatic Expansion of a perfect gas.

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