Raniganj Girls' College
Chemistry Department

Physical Chemistry Questions for sem II(C-III)

1. Write van der Waals equation of state.
2. What is compressibility factor? What is its signifance?
3. Describe virial equation of state. What is the signifance of second virial coefficient?
4. What is Boyle Temperature?
5. State kirchoff's equation related to heat transfer.
6. Prove that adiabatic PV curve is more steeper than that of isothermal one.
7. For ideal gas , show that $c_p - c_v = R$.
8. Prove that $Q_p = Q_v + \Delta n\ RT$.
9. What is Reynolds number?
10. What is the difference between streamline and turbulent motion.
11. Derive Poiseuille's equation.
12. Describe the principle of determination of viscosity coefficients of liquid by Ostwald viscometer.
13. Describe the principle of determination of surface tension of liquid by capillary rise method.
14. Write short notes on temperature dependence of surface tension.
15. What do you mean by Intrinsic viscosity?