Model Paper 2014 Physics

Inter 1st Year

Time: 3 Hours

Max.marks:60

<u>Section – A</u>

Answer all questions, each carry two marks.

- 1. What is the discovery of C.V.Raman?
- 2. Write the dimensional formulae for the following quantities.
 - 1. Gravitational constant 2. Surface Tension

10x2 =20marks

- 3. A ball falls freely from a height 1m on the ground and rebounds to a height of 0.8m. Find the coefficient of restitution.
- 4. Distinguish between centre of mass and centre of gravity.
- 5. What are the theoretical and practical limits of Poisson's ratio?
- 6. Find the excess pressure inside a liquid drop?
- 7. Hot liquids flow faster than cold liquids? Explain.
- 8. What is the specific heat of a gas in a) an isothermal change and b) an adiabatic change?
- 9. State the conditions under which Newton's law of cooling is applicable?
- 10. What is Greenhouse effect?

<u>Section – B</u>



Each carry four marks



11. State parallelogram law of vector addition and derive an expression for its magnitude.