Course Code: 1MSCP2 Course: Classical Mechanics Credit: 3 Last Submission Date: April 30 (for January Session) October 31, (for July session)

> Max. Marks:-30 Min. Marks:-11

Note:-attempt all questions.

- Que.1 State and explain the principle of virtual work .
- Que.2 State and prove Hamilton's principle.
- Que.3 State and prove the Poisson's the Orem.
- Que.4 Explain Ruther ford scattering in detail.
- Que.5 What are Eulerian coordinates Discuss Briefly.
- Que.6 Discuss the stationary property of the normal modes.
- Que.7 Derive the equations of Lorentz transformation .
- Que.8 Explain -4 momentum and 4- force.