

Roll No

PH-110

B.E. (All Branches) First Semester

Examination, December 2016

Choice Based Credit System (CBCS)

Physics

Time : Three Hours

Maximum Marks : 60

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. Discuss Maxwell's equations in integral and differential form.
2. Explain construction and working of a Ruby laser.
3. Explain pulse dispersion in a step-index fiber.
4. Derive expression for Compton shift in Compton scattering process.
5. Explain Newton's rings experiment.
6. Give working of Zener diode and Photo diode.
7. Explain salient features of liquid drop model for nucleus.

8. Write short notes on:

- a) Uncertainty principle
- b) Hall effect
- c) Coulomb's law
