

B.SC -(ELECTRONICS ) SEM VI

PAPER -XIV

GROUP –A

SHORT QUESTION

ANSWER ANY THREE QUESTIONS

- 1 Discuss PIN photodiode.
- 2 Explain advantages and disadvantages of LED.
- 3 What is Schottky barrier? Explain the Electron-hole pair formation and recombination band in optical process semiconductor.
- 4 What is Phototransistor ?
- 5 Explain Solar Cell.
- 6 What do you mean by junction photodiode?

GROUP- B

ANSWER ANY TWO QUESTIONS 2\*25=50 MARKS

- 7 What is the electro-optic effect ? How can the amplitude of the optical signal be modulated.
- 8 What do you mean by LED ? Describe the structure of LED.
- 9 Give I-V Characteristic of LED with neat diagram and explain its spectral and frequency response.
- 10 What is Optical Switch? Explain its operation, function and performance.
- 11 Describe the Construction and working of a Solar Cell.