



12. (a) Discriminate the different LED structures based on its construction and operating principle.

Or

- (b) Explain the light amplification process in LASER with neat diagram.

13. (a) Explain the construction and working principle of photo detectors.

Or

- (b) Discuss the operation PIN diode and Avalanche photo diode and state its applications.

14. (a) Discuss in detail about electro optic and acousto optic modulators and their applications.

Or

- (b) Distinguish Electro optic phase modulation and Electro optic Amplitude Modulation.

15. (a) Explain in detail the process of hybrid and monolithic integration in OEIC.

Or

- (b) Paraphrase the operation and applications of guided wave devices in Integrated Transmitters and Receivers.

PART C — (1 × 15 = 15 marks)

16. (a) Appraise the prospects for optical interconnects.

Or

- (b) Evolve a schematic for an optical communication system for long distance high bitrate information transfer using suitable opto electronic components and explain each.
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