Q2 (a) Discuss the various elements of optical fiber transmission link.

Answer Page Number 10-11 of Textbook

Q2 (b) Discuss various fiber fabrication techniques.

Answer Page Number 70 - 75 of Textbook

Q3 (a) Derive an expression for group delay and dispersion when signal propagates along the fiber.

Answer Page Number 106-107 of Textbook

Q3 (b) Describe the effect of mode coupling on pulse distortion.

Answer Page Number 121 of Textbook

Q4 (a) Derive an expression for optical-power generated internally to the LED.

Answer Page Number 157-158 of Textbook

Q4 (b) Describe aPD and RaPD.

Answer Page Number 249 of Textbook

Q5 (a) What do you mean by splicing of fiber? Explain various steps involved in splicing procedures.

Answer Page Number 228 – 229 of Textbook

Q5 (b) Explain controlled-fracture procedure for fiber end preparation.

Answer Page Number 226 of Textbook

Q6 (a) Explain the procedure to calculate the sensitivity of an optical receiver.

Answer Page Number 292 - 293 of Textbook

Q6 (b) Draw and explain simple high-impedance preamplifier using a FET.

Answer Page Number 307 of Textbook

Q7 (a) Explain briefly
        (i)   Carrier Power
        (ii)   RIN

Answer   Page Number 360-362 of Textbook

Q7 (b) With neat schematic, explain basic concept of subcarrier multiplexing.

Answer Page No 374 of Textbook

Q8 (a) How the system requirements specified related to point to point optical communication links.

Answer Page Number 322 of Textbook

Q8 (b) With Block-Diagram, explain aRQ error-correction scheme.

Answer Page Number 340 of Textbook

Q9 (b) Write short notes on
  (i) Performance of Passive Linear Busses
  (ii) architecture of four-fiber bidirectional line switched ring (BLSR)

Answer
  I. Page Number 461 of Textbook
  II. Page No 474 of Textbook

Text Book

Optical Fiber Communications, Gerd Keiser, 3rd Edition, McGraw Hill Publications, 2000.