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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(ECE) (2016 Batch) (Sem.-2)
OPTICAL COMMUNICATION SYSTEMS

Subject Code : MTEC-201

Paper ID : [74278]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

- Q1. a) Explain the photo detector with its characteristics in detail.
b) Discuss about wave propagation dispersion with its limitations in detail.
- Q2. a) Discuss in detail about the Transmitter design in Optical Transmitter.
b) Explain the noise and sensitivity in optical receiver sensitivity degradation in detail.
- Q3. a) What are needs of pre-compensation schemes? And also, explain the compensation techniques in detail.
b) Discuss about EDFA in detail.
- Q4. Discuss the WDM light wave systems in detail.
- Q5. Explain the different types of non-linear effects in optical communication systems in detail.
- Q6. Discuss Pre compensation and Post compensation dispersion management techniques used in optical communication system in detail.
- Q7. Explain fiber solutions soliton based optical communication in detail.
- Q8. Write short notes on the followings :
- a) Raman Amplifier.
 - b) Fiber Bragg Grating.