No. of Printed Pages : 4
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171054/121054/
031054B

5th Sem.

Subject : Optical Fiber Communication

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Objectives type questions. All questions are compulsory (10x1=10)

(Course Outcome/CO)

Q.1 What is critical Angle? (CO-1)

Q.2 Draw the structure of optical fiber cabe (CO-1)

Q.3 What is snell's Law. (CO-1)

Q.4 Define fusion splicing. (CO-3)

Q.5 What is dispersion? (CO-2)

Q.6 LASER stand for _____. (CO-5)

Q.7 An optical light source convert _____. (CO-5)

Q.8 What is optical Detector? (CO-5)

Q.9 EDEA stand for _____. (CO-6)

Q.10 Define Bit Rate. (CO-2)

SECTION-B

Note: Very Short answer type questions. Attempt any ten parts 10x2=20

Q.11 What is optical fiber Communication system (CO-1)

Q.12 What do you understand by optical fiber cable connectors? (CO-6)

Q.13 What is electromagnetic spectrum used in OFC? (CO-1)

Q.14 What are the types of optical fiber? (CO-4)

Q.15 Define attenuation. (CO-2)

Q.16 What is spontaneous Emission (CO-5)

Q.17 What are the main cause of absorption in optical fiber? (CO-2)

Q.18 What do you mean by optical source (CO-5)

Q.19 Define APD? (CO-5)

Q.20 What is Quantum Efficiency (h) (CO-5)

Q.21 Describe 'RAMAN Amplifier' (CO-6)

Q.22 How many types of Absorption losses? (CO-2)

SECTION-C

Note: Short answer type questions. Attempt any eight questions. 8x5=40

Q.23 Explain the historical perspective of optical fiber communication. (CO-1, CO-6)

Q.24 What are advantages of graded index fiber over step index fiber? (CO-4)

Q.25 What is optical fiber cable connector? Explain (CO-6)

Q.26 Explain in brief scattering losses. (CO-2)

Q.27 Give the difference between LED vs ILD. (CO-5)

Q.28 Explain in brief population inversion. (CO-5)

Q.29 What are Photo Detector & its characteristic. (CO-5)

Q.30 What is RAMAN Amplifier? Explain(CO-1, CO-6)

Q.31 What are applications of fiber optics. (CO-1)

Q.32 What is the the Principle and operations of LED? (CO-5)

SECTION-D

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.33 What are losses? Explain testing of losses using OTDR. (CO-2)

Q.34 Explain the principle of light penetration, reflection and critical angle in optical fiber cable (CO-1, CO-4)

Q.35 Describe LASER as Light source and its characteristics explain. (CO-5)

Q.36 What are different types of optical Amplifier? Explain SoA. (CO-1, CO-6)

(**Note:** Course outcome/CO is for office use only)