

differ, but the wave stays in the original medium instead of passing into the second medium.

1.Total internal Reflection

2.Refraction

3.Reflection

4.Reflectance

10. The acceptance angle of a material with a numerical aperture of 0.707 in air is _____. CO5 K1
 1.30 2.60
 3.40 4.45

Q. No. SECTION - B (5 * 4 = 20 Marks) CO(s) K - Level
Answer ALL Questions

11. (a) Relate function of core with cladding in optical fiber. CO1 K1
 [OR]
 (b) List out the advantages and disadvantages of fiber optic communications. CO1 K1
12. (a) Outline the scattering losses in optical fibers. CO2 K2
 [OR]
 (b) Explain the signal distortion in optical wave guide CO2 K2
13. (a) Show the plastic fibers and their applications. CO3 K3
 [OR]
 (b) Examine the rod-in-tube method. CO3 K3
14. (a) Show the direct and indirect band gap with suitable diagram. CO4 K3
 [OR]
 (b) Examine the p-i-n photodiode and give two advantages. CO4 K3
15. (a) Explain the measurements of mode field diameter. CO5 K4
 [OR]
 (b) Explain the numerical aperture. CO5 K4

Q. No. SECTION - C (3 * 10 = 30 Marks) CO(s) K - Level
Answer any of 3

16. What are the application of step index and graded index fiber? CO1 K1
17. Outline the fiber splicing in detail with suitable diagram. CO2 K2
18. Examine the modified chemical vapor deposition with diagram and give the advantage of this method. CO3 K3
19. Can you compare photodiode with photodetector? CO4 K3
20. Explain the measurements of mode field diameter in detail. CO5 K4
