Reg. No. :

Question Paper Code: 4033135

M.E. / M.Tech. DEGREE EXAMINATIONS, NOV/ DEC 2024
Third Semester
Communication System
P23CUT31 – OPTICAL COMMUNICATION AND NETWORKING
(Regulation 2023)

Time: Three Hours   Maximum: 100 Marks

Answer ALL questions

PART – A   (10 x 2 = 20 Marks)

1.   What are optical system components?

2.   List out the needs for network design.

3.   List out some of the advantages of coherent systems.

4.   Define: ASK.

5.   Name some of the optical network architectures.

6.   What is overlay processor?

7.   Define: Network Connections.

8.   What do you mean by traffic grooming in optical networks?

9.   Define: Optical network survivability.

10.   What are the limitations of ML?

PART – B   (5 x 16 = 80 Marks)

11. (a) Discuss in detail about wavelength converters.   (16)

(OR)

(b) Explain about transmission system engineering with suitable diagrams.   (16)

12. (a) Describe about demodulation schemes in detail.   (16)

(OR)

(b) Explain in detail about POL SK.   (16)

13. (a) Explain about Optical Network Nodes.   (16)

(OR)

(b) What are logical network overlays? Explain in detail.   (16)

14. (a) Discuss in detail about wavelength routed networks.   (16)

(OR)

(b) Describe about Logically routed networks.   (16)

15. (a) Explain about multi-layer perceptions.   (16)

(OR)

(b) Write short notes on Convolution Neural Networks.   (16)

--------xxx-------