

BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY

QUESTION BANK

Unit Test-II

Program: - EJ

Semester: - VI Course:-ONS (316332)

Unit-II Optical Communication Systems (14 M)

2 Marks Questions

1. What is bit error rate?
2. Define optical Coupler.

4 Marks Questions

3. Explain eye error rate.
4. Give working principle of isolator.
5. State two distinguishing features of following Standards: (i) IEEE 802.3j (ii) IEEE 802.3y (iii) IEEE 802.3z
6. Give advantages and disadvantages of APD.
7. Describe operation of PIN diode.
8. State the working principle of optical switch and give its necessity in optical network.

Unit -IV Overview of Satellite Systems (12 M)

2 Marks Questions

9. Define: i. Elevation angle ii. Station Keeping

10. State the reason: Uplink frequency in satellite communication is different from downlink frequency.

11. Define: 1) Passive satellite 2) Active satellite

4 Marks Questions

12. Define the following terms w. r.t. satellite i. Footprint ii. Orbit iii. Azimuth angle iv. Elevation angle v. Look angle.

13. Explain Kepler's 1st, 2nd, 3rd law.

14. Explain the concept of geostationary orbit.

15. The orbit of an earth-orbiting satellite has an eccentricity of 0.15 and a semi-major axis 9000KM determine the apogee.[assume mean value of earth's radius is 6371KM]

16. Define the term 'orbit' w.r.t. satellite. List different types of orbits of satellite.

Unit-V Satellite Space Segments and Space link(16 M)

2 Marks Questions

17. List various elements of transponder.

18. Specify the function of altitude control system.

19. Define Equivalent Isotropic Radiated power (EIRP) and give its expression.

4 Marks Questions.

20. Explain the satellite subsystem with block diagram.

21. State the function of following in satellite. (i) Propulsion control (ii) Telemetry and Tracking system (iii) LNA

22. Explain power subsystem used for Satellite.

23. Explain working principle of VSAT.

24. Explain the working of satellite transponder.

25. Explain working of GPS system.