

CBCGSH-ESE(October 2020)

Satellite Communication Mock questions

PEC-ETC8043

1. What is the altitude of LEO orbit?
 - a. 36000Km
 - b. 1000Km
 - c. 12000Km
 - d. 20Km
2. What is the delay when communicating with GEO satellite?
 - a. 1sec
 - b. 10 sec
 - c. .1 sec
 - d. .25 sec
3. What is the distance between two satellites when we place three satellite in Geostationary satellite at the edges of an equilateral triangle?
 - a. 42000Km
 - b. 36000Km
 - c. 82000Km
 - d. 1000Km
4. Which of the following is example of MEO constellation?
 - a. Irdium
 - b. GPS
 - c. Inter satellite space station
 - d. GSAT
5. Geostationary orbit has eccentricity of
 - a. $E = 1$
 - b. $E = 0$
 - c. $E = 0.1$
 - d. $E = 10^{-5}$
6. Earth eclipse occurs when the shadow of ----- falls on -----
 - a. Earth, satellite
 - b. Satellite , Earth
 - c. Moon , earth
 - d. Sun, Satellite
7. Dead satellites drift towards
 - a. 75E, 105 W
 - b. 105 E, 75 W
 - c. 150 E, 30 W
 - d. 60 E, 120 W

8. During which month we experience Sun transit
 - a. March
 - b. June
 - c. September
 - d. December
9. During heavy rain we donot receive signal due to
 - a. Ionization
 - b. Ionosphere
 - c. Polarization
 - d. Depolarization
10. The antenna is kept at some elevation to reduce -----
 - a. Noise due the radiation from earth
 - b. Noise due the radiation from sun
 - c. Noise due the radiation from Moon
 - d. Noise due the radiation from stars
11. The line joining perigee and apogee is called
 - a. Line of Nodes
 - b. Line of apsides
 - c. First line of aries
 - d. Perpendicular line
12. The nodes formed at the point of intersection of satellite with the equatorial plane
 - a. Ascending node, descending node
 - b. Perigee, Apogee
 - c. Eccentric anomaly, Mean anamoly
 - d. RAAN, Argument of perigee
13. The received power at the satellite is given by
 - a. $P_r = P_t G_T G_R \text{ Losses}$
 - b. $P_r = P_t G_T G_R / \text{Losses}$
 - c. $P_r = P_t G_T \text{ Losses} / G_R$
 - d. $P_r = P_t G_R \text{ Losses} / G_T$
14. Maximum Losses in satellite communication is because of
 - a. Atmospheric absorption
 - b. feeder losses
 - c. FSL
 - d. polarization
15. What is the value of FSL in Cband communication link at the altitude of 36000Km from the surface of the earth
 - a. 200dB
 - b. 207 dB
 - c. 205 dB
 - d. 206dB
16. What is the time for which leo satellite is visible to any earth station
 - a. 24 hrs
 - b. 8 hrs
 - c. 15 min
 - d. 10 hrs

17. The geometric shape of a non-circular orbit of a satellite is ____.

- A. Ellipse
- B. Parabolic
- C. Hyperbolic
- D. Paraboloid

18 What is the fuel used in propulsion system in a satellite

- a. Oxygen and Hydrogen
- b. Hydrazine
- c. Petrol
- d. Desiel

19.What is the first block of telemetry

- a. transducer
- b. Antenna
- c. Filter
- d. LNA

20 The command signal is implemented

- a. Immediatetely after receiving from ES
- b. after verification of command from control station
- c. No action is taken
- d. Decision is taken by telemetry block

21. A satellite stays in orbit because the following two factors are balanced.

- a. Satellite weight and speed
- b. Gravitational pull and inertia
- c. Centripetal force and speed
- d. Satellite weight and the pull of the moon and sun

22.The satellite subsystems that monitors and controls the satellite is the

- a. Propulsion subsystem
- b. Power subsystem
- c. Communications subsystem
- d. Telemetry, tracking, and command subsystem

23. How can multiple earth stations share a satellite on the same frequencies?

- a. Frequency reuse

b. Multiplexing

c. Mixing

d. They can't

24. What band does VSAT first operate?

A. L-band

B. X-band

C. C-band

D. Ku-band

25. Earth station uses what type of antenna

A. yagi antenna

B. Helical antenna

C. Toroidal antenna

D. Cassegrain antenna

26. "The orbit of any planet is an ellipse with the sun at one focus". This is

a. Kepler's First Law

b. Kepler's Second Law

c. Kepler's Third Law

d. Law of Universal Gravitation

27. Satellite position has an/a _____ angle with respect to the horizon.

a. Azimuth

b. Depression

c. Elevation

d. Critical

28. The satellite multiple access technique which uses the spread spectrum technology is

a. FDMA

b. TDMA

c. CDMA

d. DAMA

29. Satellite system or part of a satellite system, consisting of only one satellite and the operating earth station.

a. Satellite system

- b. Satellite network
- c. Space system
- d. Multi-satellite link

30. The FDMA technique wherein voice band channels are assigned on “as needed” basis.

- a. PAMA
- b. DAMA
- c. SSMA
- d. CDMA