

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