

MULTIPLE CHOICE QUESTIONS IN DATA COMMUNICATIONS AND NETWORKING

A Complete Chapter Quiz

Wireless WANs: Cellular Telephone and Satellite Networks

Compilation of all the quizzes (MCQs) for each and every chapters in the book of Data Communications and Networking 4th Edition by Behrouz A. Forouzan.

1. [IS-95](#) uses the _____ satellite system for synchronization.
A) Iridium
B) **GPS**
C) Teledesic
D) none of the above
2. _____ satellites can provide direct universal voice and data communications for handheld terminals.
A) Teledesic
B) GPS
C) **Iridium**
D) none of the above
3. _____ is a second-generation cellular phone system based on CDMA and DSSS.
A) **IS-95**
B) D-[AMPS](#)
C) [GSM](#)
D) none of the above
4. GSM allows a reuse factor of _____.
A) 7
B) 5
C) **3**
D) 1
5. In the third generation of cellular phones, _____ uses CDMA2000.
A) **IMT-MC**
B) IMT-TC
C) IMT-SC
D) IMT-DS
6. [Iridium satellites](#) are _____ satellites.
A) MEO
B) **LEO**
C) GEO
D) none of the above
7. In an IS-95 system, the frequency-reuse factor is normally _____.
A) 7
B) 5
C) 3
D) **1**
8. _____ is a second-generation cellular phone system used in Europe.
A) IS-95
B) **GSM**
C) D-AMPS
D) none of the above
9. A GEO is at the _____ orbit and revolves in phase with Earth.
A) inclined
B) polar
C) **equatorial**
D) none of the above
10. _____ is a first-generation cellular phone system.
A) GSM
B) **AMPS**
C) D-AMPS
D) none of the above
11. _____ is a digital version of AMPS.
A) GSM
B) IS-95
C) **D-AMPS**
D) none of the above
12. In the third generation of cellular phones, _____ uses TDMA.
A) IMT-TC
B) **IMT-SC**
C) IMT-MC
D) IMT-DS

13. In a _____ handoff, a mobile station can communicate with two base stations at the same time.

- A) soft
- B) hard
- C) medium
- D) none of the above

14. IS-95 uses the ISM _____ band.

- A) 800-MHz
- B) 900-MHz
- C) 1900-MHz
- D) either (a) or (c)

15. _____ satellites provide time and location information for vehicles and ships.

- A) Teledesic
- B) GPS
- C) Iridium
- D) none of the above

16. There is (are) _____ orbit(s) for a GEO satellite.

- A) two
- B) one
- C) many
- D) none of the above

17. GPS satellites are _____ satellites.

- A) MEO
- B) LEO
- C) GEO
- D) none of the above

18. The period of a satellite, the time required for a satellite to make a complete trip around the Earth, is determined by _____ law.

- A) Ohm's
- B) Newton's
- C) Kepler's

D) none of the above

19. LEO satellites are normally below an altitude of _____ km.

- A) 3000
- B) 2000
- C) 1000
- D) none of the above

20. _____ is a second-generation cellular phone system.

- A) GSM
- B) AMPS
- C) D-AMPS
- D) none of the above

21. In AMPS, each band is divided into _____ channels.

- A) 1000
- B) 900
- C) 800
- D) none of the above

22. In the third generation of cellular phones, _____ uses W-CDMA.

- A) IMT-TC
- B) IMT-DS
- C) IMT-SC
- D) IMT-MC

23. In a _____ handoff, a mobile station only communicates with one base station.

- A) soft
- B) medium
- C) hard
- D) none of the above

24. AMPS uses _____ to divide each 25-MHz band into channels.

- A) TDMA
- B) FDMA
- C) CDMA
- D) none of the above

25. _____ is based on a principle called trilateration.
- A) Iridium
 - B) Teledesic
 - C) GPS
 - D) none of the above
26. _____ satellites will provide universal broadband Internet access.
- A) Teledesic
 - B) GPS
 - C) Iridium
 - D) none of the above
27. The _____ cellular phone system will provide universal personal communication.
- A) second-generation
 - B) third-generation
 - C) first-generation
 - D) none of the above
28. AMPS has a frequency reuse factor of _____.
- A) 7
 - B) 5
 - C) 3
 - D) 1
29. AMPS operates in the ISM _____ band.
- A) 1800-MHz
 - B) 900-MHz
 - C) 800-MHz
 - D) none of the above
30. Low-Earth-orbit (LEO) satellites have _____ orbits.
- A) polar
 - B) inclined
 - C) equatorial
 - D) none of the above
31. The signal from a satellite is normally aimed at a specific area called the _____.
- A) effect
 - B) footprint
 - C) path
 - D) none of the above
32. _____ is an analog cellular phone system using FDMA.
- A) GSM
 - B) AMPS
 - C) D-AMPS
 - D) none of the above
33. Teledesic satellites are _____ satellites.
- A) MEO
 - B) LEO
 - C) GEO
 - D) none of the above
34. GSM is a digital cellular phone system using _____.
- A) FDMA
 - B) CDMA
 - C) TDMA
 - D) both (a) and (c)
35. In the third generation of cellular phones, _____ uses a combination of W-CDMA and TDMA.
- A) IMT-TC
 - B) IMT-SC
 - C) IMT-DS
 - D) IMT-MC
36. MEO satellites are located at altitudes between km.
- A) 5000 and 10,000
 - B) 5000 and 15,000
 - C) 3000 and 5000
 - D) none of the above

37. IS-95 is based on _____.

- A) DSSS
- B) FDMA
- C) CDMA
- D) all of the above

38. D-AMPS uses _____ to divide each 25-MHz band into channels.

- A) FDMA
- B) CDMA
- C) TDMA
- D) both (a) and (c)