

## Mobile Communication

### Unit 1-3

#### Quiz

1. The actual radio coverage of a cell is known as \_\_\_\_\_ and is determined from the field measurements
  - a. footprint
  - b. cluster
  - c. capacity
  - d. channel
2. In Mobile telecommunication systems, a number of databases are used to store information about mobile users. One of these databases contains data records about mobile stations that can be used to check for stolen mobile stations. This type of database is known as :
  - a. HLR
  - b. VLR
  - c. EIR
  - d. SLR
3. In a regular hexagonal geometry pattern, the number of cell in a cluster formed by  $i=2$  and  $j=2$  are:
  - a. 4
  - b. 7
  - c. 9
  - d. 12
4. A mobile comm system is designed with a cluster size of 7. If the area of a cell is 5 sq km the area of cluster is:
  - a. 12 sq km
  - b. 7/5 sq km
  - c. 25 sq km
  - d. 35 sq km
5. The process of transferring an active call from one cell to another as the mobile unit moves from the first cell to the other cell without disconnecting the call.
  - a. frequency reuse
  - b. handoff
  - c. cell splitting
  - d. cell geometry
6. To handle the simultaneous traffic of high speed and low speed users following concept is used:
  - a. Micro cell concept
  - b. Cell splitting concept
  - c. Macro cell concept
  - d. Umbrella cell
7. Higher value of Q is achievable in:
  - a. big cluster size
  - b. small cluster size
  - c. medium cluster size
  - d. None of the above
8. For a cluster size of 7, the co-channel reuse ratio is:
  - a. 3
  - b. 7
  - c.  $\sqrt{21}$
  - d. 21
9. The table used for calculating the probability of delay is
  - a. Erlang B table
  - b. Erlang C table
  - c. Queing method
  - d. None of the above
10. The mobile technology using general packet radio service (GPRS) standard has been termed as
  - a. 1G
  - b. 2G
  - c. 3G
  - d. 2.5G
11. The two 3G systems developed are

- a. GSM, CDMA b. AMPS, CDMA c. UMTS, IMT-2000 d. CDMAone, UMTS

12. The frequency band used for mobile communication is:

- a. VHF b. UHF c. SHF d. EHF

13. 3G network uses following access technology:

- a. EDGE b. CDMA c. WCDMA d. OFDMA

14. Match the following:

- |         |         |
|---------|---------|
| a. AMPS | a. 3.5G |
| b. GSM  | b. 2G   |
| c. GPRS | c. 3 G  |
| d. UMTS | d. 2.5G |
| e. HSPA | e. 1G   |

15. Match the following:

- |           |          |
|-----------|----------|
| a. 3G     | a. OFDMA |
| b. 1G     | b. TDMA  |
| c. 2G-GSM | c. WCDMA |
| d. 4G     | d. FDMA  |