Question **1**

Not yet answered

Marked out of 1.00

Flag question

Consider the following two scenarios:

1) 10 users makes 2 calls in average, where each call is of 3 mins duration.

2) 5 users makes 3 calls in average, where each call is of 4 mins duration.

Which of the following statements is true for the same probability of blocking?

Select one:

- a. both scenarios needs the same number of channels
- b. More channels are needed in scenario 1
- c. More channels are needed in scenario 2

Question **2**

Not yet answered

Marked out of 1.00

Flag question

Dividing cells into sectors will always lead to higher system capacity.

Select one:

- True
- False

Question **3**

Not yet answered

Marked out of 1.00

Flag question

The power margin should be large enough so that:

Select one:

- a. avoid unnecessary handovers.
- b. none of the answers
- c. increase the capacity of the network
- d. provide priority to handover users
- e. the network has enough time to execute the handover.

Question **4**

Not yet answered

Marked out of 2.00

Flag question

Given a cellular network with the following characteristics:

-Cluster size N=7

-Number of available duplex channels S=56

-probability of blocking 1%

- a user make 2 calls each of duration of 3 mins

What is the number of users that can be served by a cell?

Select one:

- a. 3
- b. 56
- c. 10
- d. 31
- e. 8

Question **5**

Not yet answered

Marked out of 1.00

Flag question

The mechanism that enables users to continue ongoing call during mobility is:

Select one:

- a. Handover
- b. None of the answers
- c. Tiling
- d. Trunking
- e. Frequency reuse

Question **6**

Not yet answered

Marked out of 1.00

Flag question

In cellular networks, we can re-use the frequencies in two cells as long as they are not neighbors.

Select one:

- True
- False

Question **7**

Not yet answered

Marked out of 1.00

Flag question

A disadvantage of reducing the cluster size is:

Select one:

- a. smaller system capacity
- b. reducing the quality of the voice
- c. more frequency reuse
- d. none of the answers

Question **8**

Not yet answered

Marked out of 2.00

Flag question

Given a cellular network with the following characteristic::

-Area of 1000 Km2

-population of 500 users per Km2

-number of available channels S=140

-Cluster size N=7

-each user generates 0.01 Erlang

-probability of blocking=5%

What is the number of cells require to serve the area?

Select one:

- a. 480
- b. 5000
- c. 500
- d. 176
- e. 200
- f. 329
- g. 140
- h. 280