

1. Modify the following texts so that the statements will be true.

Standard Bluetooth is proprietary $\left(\begin{smallmatrix} \text{open} \\ \text{close} \end{smallmatrix}\right)$ standard for $\left(\begin{smallmatrix} \text{fixed} \\ \text{wireless} \end{smallmatrix}\right)$ communication.

Communication at Bluetooth standard is realized on the $\left(\begin{smallmatrix} \text{long} \\ \text{short} \end{smallmatrix}\right)$ distances between various types of electronic devices (e.g. mobile (smart) phones, wireless headphones,...).

2. Which layers are included in the layer model for data transmission on Bluetooth technology?

1. _____

2. _____

3. _____

3. Select and mark in the following table the basic key features of Bluetooth technology (one on each column):

MODULATION	FREQUENCY BAND	MULTIPLEX
GFSK	5 GHz	TDD
QAM	900 MHz	CDM
GMSK	2,4 GHz	FDM
VDMT	1800 MHz	TDM

4. Modify the following texts so that the statements will be true.

Communication security is in terms of the confidentiality of the content of the transmitted information carried by the $\left(\begin{smallmatrix} \text{data link} \\ \text{logical} \end{smallmatrix}\right)$ layer. The $\left(\begin{smallmatrix} \text{three} \\ \text{four} \end{smallmatrix}\right)$ entities (keys) are used to ensure of secured communication.



5. Realize an overview of the keys that are used for communication security by Bluetooth technology.

1. _____
2. _____
3. _____
4. _____

6. Identify and draw possible network topologies used within the Bluetooth technology:



7. Modify the following texts so that the statements will be true.

Set of two or more devices, that share the same $\begin{pmatrix} \text{physical} \\ \text{logical} \end{pmatrix}$ channel, is called as $\begin{pmatrix} \text{scatternet} \\ \text{piconet} \end{pmatrix}$.

$\begin{pmatrix} \text{Any} \\ \text{One} \end{pmatrix}$ device $\begin{pmatrix} \text{is} \\ \text{isn't} \end{pmatrix}$ always in piconetwork from the view of communication control superior to each other's. Synchronization and frequency sequences are always derived from the $\begin{pmatrix} \text{slave} \\ \text{master} \end{pmatrix}$ station.

8. Indicate the processes used for handle of the bit flows on the physical layer of Bluetooth technology.

Processing of header bits	Processing of user data bits

