

1. Communication through the supply network uses a modulation for signal transmission in the frequency range?

- od 10 Hz do 200 Hz
 - od 200 Hz do 10 kHz
 - od 20 kHz do 100 MHz
 - od 100 MHz do 200 MHz
-

2. Arrange the wireless technologies ZigBee (2400 Hz), ZigBee (868 Hz), Z-Wave, EnOcean, Bluetooth according the transmission speed (1 – the lowest, 5 - the highest).

1. _____
 2. _____
 3. _____
 4. _____
 5. _____
-

3. Assign names for the following wireless technologies definitions.

| Technology | Definition |
|------------------|--|
| Z-Wave | It has been proposed for use in a home automation and also in industrial use. It is a networking standard operating in the called routed mode |
| ZigBee | This standard is focused primarily on applications for home automation. The communication protocol of this technology routes messages using Source Routing Algorithm (SRA). |
| WiFi | It is used to connect the IP camera in home automation, to connect any media device in the home, including mobile devices and computers in distance from 50 to 100m. |
| EnOcean | This technology is used mainly in mobile phones and wireless headsets, tablets and PCs, especially as a replacement for wired peripherals. In home automation it focuses on the eHealth field for sensing the biometric characteristics of the user. |
| Bluetooth | This standard is mainly used in building automation, logistics and goods transport in industry. It uses the energy from the surroundings to supply sensors. |

4. Arrange the wireless technologies ZigBee, EnOcean Z-Wave, Bluetooth according to the energy needed (1 - the lowest, 5 – the highest)

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



5. Modify the following texts so that the statements are true.

KNX is a European (EN50090, 2003) and international (ISO / IEC 14543-3, 2006) standard for (home and building automation) (industry automation).

LON stands for Local Operating Network, originally introduced as a solution (for automation in industrial buildings, airports) (for automation of homes and flats).

LON architecture uses (decentralized) (centralized) management.

Under the controller is meant a (control device) (sensor device) that acts as a "brain" in the whole home automation system.

6. List four used ways of knowing location.

- a) _____
 - b) _____
 - c) _____
 - d) _____
-

7. List entities defined in ZigBee technology.

- a) _____
- b) _____
- c) _____