1. Which of the following statements regarding Smart home system are valid:

x can be created from scratch at home

x are available as a bundled smart home kit

x have lot of open source software implementation

x can be completely purchased

1. Which technologies belong to IoT technologies for home automation?

x LoRaWan

□ DLMS

x SigFox

□ PLC

1. Select smart TV technologies below the table and assign them to corresponding types of services/interfaces in the table!

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Live broadcasting**  **DVB-T**  **DVB-S**  **DVB-C** | **Wireless interfaces**  **Wi-Fi**  **Bluetooth** | **Cable (LAN)**  **network**  **Ethernet** | **Input video**  **HDMI**  **S-video** | **Data**  **USB** | **CI/CI+ module**  **Smart card** |

**Ethernet DVB-C Firewire Bluetooth DVB-T Smart card Wimax**

**HDMI GPS DVB-S Wi-Fi LTE USB S-video**

1. Add words below to correct places in the sentence!

TV sets that are DLNA (Digital Living Network Alliance) certified are able to play multimedia content from other DLNA devices (PCs, tablets, smartphones, media servers, etc.).

**devices smartphones certified multimedia content**

1. Fill in the sentence!

Smart appliances are appliances which are equipped by wireless interface and which can be remotely controlled.

1. Assign the terms from the left column (sensors) to the corresponding ones on the right (measured parameter)!

|  |  |  |
| --- | --- | --- |
| Accelerometer |  | Picture |
| Gyroscope |  | Object distance from a smartphone |
| Magnetometer |  | Finger touch |
| Barometer |  | Position on Earth |
| Distance sensor |  | Sound |
| Light sensor |  | Light conditions |
| Touch screen |  | Atmospheric pressure |
| GPS |  | Orientation and angular velocity |
| Front and rear camera |  | Magnetic field |
| Microphone |  | Acceleration |

1. What are the important features of Intelligent transport systems?

a) \_\_Public Transportation Management\_\_

b) \_\_Route Information and trip planning\_\_

c) \_\_Safety and Vehicle Control\_\_

d) \_\_Electronic Timetable\_\_

e) \_\_Electronic Payment System\_\_

f) \_\_Smart Parking\_\_

g) \_\_Mobility as a service\_\_

1. Add words below to the smart watches diagram at correct gaps!

Application

processor

Battery

Sensors

Display subsystem

with touchscreen

Battery and

power management

Wireless radio

transmitter/receiver

**Interfaces to sensors**

(motion, magnetic,

temperature, humidity,

gyroscope, etc.)

Highly integrated

application-specific IC

**Battery power management Sensors processor transmitter/receiver**

**Display subsystem Interfaces temperature**

1. What are the essential areas for Smart city solutions?

a.) \_\_Intelligent transport systems\_\_

b.) \_\_Intelligent video surveillance\_\_

c.) \_\_Smart metering and smart energy systems\_\_

d.) \_\_Smart waste management\_\_

e.) \_\_Intelligent lighting\_\_

1. Add words below to correct places in the sentence!

Velocity informs the frequency of data acquisition. Variety describes the different types of data that may be handled. Volume represents the amount of data.

**Variety Velocity Volume**