

**1. Match the four different networks shown on the left column to the corresponding descriptions on the right column.**

Ad-hoc	A network supporting national, or larger, coverage to support voice, text and image communication
Bluetooth	A network suitable for a large office with a range of coverage of around 100 meters
Wi-Fi	A wireless technology to replace wiring associated with peripheral devices
Cellular	A physically small network comprising only few devices, communicating with each other in peer to peer mode

**2. Modify the following texts so that the statement is true.**

In a wireless network, an extended service set is a set of  $\left( \begin{smallmatrix} \text{connected basic service sets} \\ \text{all stations} \end{smallmatrix} \right)$

WPA stands for  $\left( \begin{smallmatrix} \text{wired privacy access} \\ \text{WiFi protected access} \end{smallmatrix} \right)$

The best way to secure a Wi-Fi network is with  $\left( \begin{smallmatrix} \text{WAP2} \\ \text{WEP} \end{smallmatrix} \right)$

**3. Here is a series of descriptions for some of the IEEE 802.11 standards. Match each item on the left column to the corresponding item on the right column.**

IEEE 802.1	Operates in the ISM frequency band with a data rate of 54 Mbps using OFDM
IEEE 802.11a	Operates in the ISM frequency band with a data rate up to 11 Mbps using DSSS
IEEE 802.11b	Operates in the ISM frequency band with a data rate of 1 or 2 Mbps using FHSS
IEEE 802.11g	Operates in the ISM frequency band with a data rate of up to 48 Mbps using OFDM



4. The OSI reference model divides network communication into seven layers. Each layer covers different network activities, equipment or protocols. Please, complete the following table with the names of the different layers. 7 is the layer at top and 1 the layer at bottom.

7.
6.
5.
4.
3.
2.
1.

5. Let's assume the following situation. You are exchanging information in a large conference room. Probably there are many other people attempting to do the same thing.

In this situation, the use of  $\begin{pmatrix} \text{Bluetooth} \\ \text{IrDA} \end{pmatrix}$  technology is the best option.

6. List the three basic elements involved in communications security.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

7. Which of the following properties are advantages or disadvantages of wireless communications: Flexibility, security, mobility, transmission speed, cost savings, interferences and productivity.

True	False

