

INTERNET OF THINGS - ANSWER KEY

Question 1:

What is active sensor and passive sensor?

Answer 1:

Active Sensors

These generate energy to scan the things and locations and then a sensor identifies and calculates the amount of either backscattered or reflected radiation from the target object. The examples of active sensors are RADAR and LIDAR where the time difference that is in between the emission process and return process is calculated by determining the area, speed, and object direction.

Passive Sensors

These sensors collect radiation which is either radiated or reflected by the surrounding locations or object. The most crucial example of a passive sensor is reflected sunlight. And the other examples are radiometers, charge-coupled objects, infrared, and film camera work.

Question 2:

What is analog sensor and digital sensor?

Answer 2:

Analog Sensors

There are different types of sensors that produce continuous analog output signal and these sensors are considered as analog sensors. This continuous output signal produced by the analog sensors is proportional to the measurand. There are various types of analog sensors; practical examples of various types of analog sensors are as follows: accelerometers, pressure sensors, light sensors, sound sensors, temperature sensors, and so on.

Digital Sensors

Electronic sensors or electrochemical sensors in which data conversion and data transmission takes place digitally are called as digital sensors. These digital sensors are replacing analog sensors as they are capable of overcoming the drawbacks of analog sensors.