**SIGNIFICANCE OF SENSOR NETWORK:**

• **Sensing accuracy:**

The utilization of a larger number and variety of sensor nodes provides potential for greater accuracy in the information gathered as compared to that obtained from a single sensor.

• **Area coverage:**

A distributed wireless network will enable the sensor network to span a greater geographical area without adverse impact on the overall network cost.

• **Fault tolerance:**

Device redundancy and consequently information redundancy can be utilized to ensure a level of fault tolerance in individual sensors.

• **Connectivity:**

Multiple sensor networks may be connected through sink nodes, along with existing wired networks (eg. Internet).

• **Minimal human interaction:**

The potential for self-organizing and self maintaining networks along with highly adaptive network topology significantly reduce the need for further human interaction with a network other than the receipt of information.

• **Operability in harsh environments:**

Robust sensor design, integrated with high levels of fault tolerance and network reliability enable the deployment of sensor networks in dangerous and hostile environments.