Assignment 12

Problem Statement: Understanding and connectivity of Raspberry-Pi /Beagle board with a Zigbee module. Write a network application for communication between two devices using Zigbee.

OR

Write a server application to be deployed on Raspberry-Pi board. Write client applications to get services from the server application.

Objectives:

To facilitate the learners to -

1. Develop mini applications on IoT boards with proper design.

Outcomes:

The learner will be able to :–

1. Develop IoT application for distributed environment.

Theory:

1)X-Bee is a low-power wireless mesh network standard, operating in the 2.4 GHz range.

2)XBee is not same as ZigBee—instead, XBee is a brand of radio communication modules (made byDigi) that can support a number of protocols, including ZigBee, 802.15.4, WiFi, Etc.

3)Its range is 10 to 100 meters.

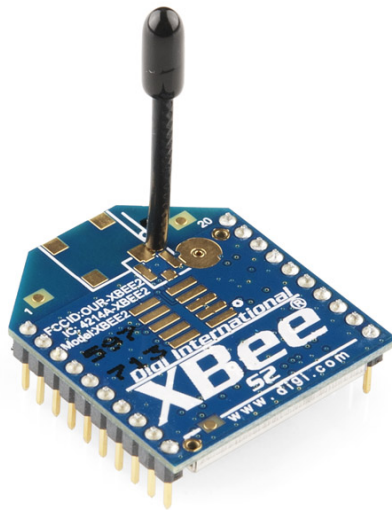4) X-Bee is often used in home automation products, though it is not the only option

Figure: XBee Module

Output: Program

Conclusion: Understood and connectivity of Raspberry-Pi /Beagle board with a Zigbee module.