Assignment No:- 6

Aim :-
Understanding & connectivity of Raspberry-Pi / Beagle board with a zigbee Module. write a network application for communication between two devices using zigbee.

Theory :-
ZigBee is a communication device used for the data transfer between the Controller, Computers, Systems, really anything with a serial port. As it works with low power consumptions, the transmission distances is limited to 10-100 meters line of sight. ZigBee devices can transmit data over long distances by passing data through a mesh network of intermediate devices to reach more distant ones. ZigBee is typically used in low data rate applications that require long battery life and secure networking. Its main applications are in the field of wireless sensor network based on industries as it requires short-range low-rate wireless data transfer. The technology defined by the ZigBee specification is

and less expensive than networks.
Here we make of ZigBee with
Raspberry wireless communication.
got four USB ports, so it ZigBee
Dongle for this want to check the
between the two paired intended to
be simpler other wireless. use of
an interface Pi2 for a proper Rasp-
berry Pi2 has is better to use a
interface. Now we Communication
ZigBee modules.

Python script to perform Zigbee
  communication :-

Import serial
#Enable USB Communication
ser = Serial. Serial ('/dev/ttyUSB0', 9600, TIMEO
= .5)
while True :
ser.write ('Hello User\r\n') #Write a
Data
incoming = ser. readline (). strip ()
print 'Received Data :' + incoming

Conclusion :-
  Thus, we have done zigbee Comm-
unication between two Raspberry
Pi Devices.