

## Course outline

How does an NPTEL online course work?

WEEK 1 Introduction to IoT

WEEK 2 Addressing the Power challenge

WEEK 3 Addressing the Power challenge continued and System Design for low power

Week 4 Sensors and actuators

WEEK 5 Power management algorithms

WEEK 6 IoT protocols – MQTT, COAP, and Websockets with associated applications

WEEK 7 Low power wireless technologies – BLE, IEEE 802.15.4e, Wi-Fi

- Introduction to low power wireless - 01
- Introduction to low power wireless – 02
- Bluetooth low energy (BLE) – 01
- Bluetooth low energy (BLE) – 02
- IEEE 802.15.4e – 01
- IEEE 802.15.4e – 02
- IEEE 802.15.4e – 03
- Wi-Fi
- Weekly Feedback Form

 Quiz: Week 7 Assessment 7

- Week 7 - Lecture notes
- Week 7 Assignment 7 Answers

WEEK 8 Low Power Wide area technologies – NBIoT, LTE-M, LoRa and BLE

Video Download

# Week 7 Assessment 7

The due date for submitting this assignment has passed.

**Due on 2021-09-15, 23:59 IST.**

As per our records you have not submitted this assignment.

- 1) In ADF7242, what is the maximum operating frequency (in \_\_\_\_MHz)?

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
(Type: Numeric) 2483.5

1 point

- 2) Find the signal voltage (in \_\_\_\_micro volts), if the receiver sensitivity is -95dBm and antenna resistance is 50 ohms.

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
(Type: Range) 3.800,4.100

3 points

- 3) Specify the minimum advertising interval (in \_\_\_\_milliseconds) in BLE?

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
(Type: Numeric) 20

1 point

- 4) IEEE standard used in Wi-Fi is

- IEEE 802.6  
 IEEE 802.11  
 IEEE 802.14  
 IEEE 802.16

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
IEEE 802.11

1 point

- 5) The sensitivity (in \_\_\_\_ dBm) of nRF52840 in BLE mode having a data rate of 125 kbps is

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
(Type: Numeric) -103

1 point

- 6) Select the statements which are FALSE regarding BLE

- It has a minimum data rate of 1 or 2 Mbps  
 Used in short range applications  
 Does not require gateway for connecting to internet  
 Require gateway for connecting to internet

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
It has a minimum data rate of 1 or 2 Mbps  
Does not require gateway for connecting to internet

1 point

- 7) The features of BLE are?

- Used for getting sensor data  
 Low power  
 Operates over 40 RF channels  
 None of the above

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Used for getting sensor data  
Low power  
Operates over 40 RF channels

1 point

- 8) The advertisement channels used in BLE are?

- 36,37,38  
 37,38,39  
 38,39,40  
 36,38,40

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
37,38,39

1 point