

Course outline

About NPTEL

How does an NPTEL online course work?

Week 0

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Week 2

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Week 6

● Lecture 26: Introduction to Python Programming- I

● Lecture 27: Introduction to Python Programming- II

● Lecture 28: Introduction to Raspberry Pi-I

● Lecture 29: Introduction to Raspberry Pi-II

● Lecture 30: Implementation of IoT with Raspberry Pi-I

● Lecture material of Week 6

● Quiz: Week 06: Assignment 06

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Week 06: Assignment 06

The due date for submitting this assignment has passed.

Due on 2025-09-03, 23:59 IST.

Assignment submitted on 2025-08-31, 10:19 IST

1) Python programming language can be easily interfaced with different IoT hardware? 1 point

- a. True
b. False

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

2) Consider the following Python instruction 1 point

aa, bb, cc = 34, [12,23,34], 56.89

Is the above a valid Python instruction?

- a. Yes
b. No

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

3) Which of the following is a valid conditional construct instruction in Python? 1 point

- a. else-if
b. elif
c. ellif
d. ele

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

4) Consider the following Python code snippet. Assume Python v3. 1 point

`with open("hello.txt", "w+") as f:`

`f.write("I am learning Python programming")`

`f.seek(0)`

`lines = f.readlines()`

`result = lines[2]`

`print(result)`

- a. 'I am'
b. 'T'
c. 'a'
d. 'am'

Yes, the answer is correct.

Score: 1

Accepted Answers:

c.

5) Which of the following is a mode to open a file in Python? 1 point

- a. Read mode
b. Write mode
c. Append mode
d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.

6) What does the following line of code do? 1 point

`GPIO.output(11,True)`

- a. Sets GPIO 11 as output pin
b. Turns on GPIO pin 11
c. Neither (a) nor (b)
d. Both (a) and (b)

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

7) What is the utility of the 'pip' instruction with respect to Python programming? 1 point

- a. To act as a package installer
b. To delete the Python version
c. To change from Python v2 to v3
d. None of the given

Yes, the answer is correct.

Score: 1

Accepted Answers:

a.

8) Suppose you have used the `sock.bind(server_address)` while writing programs with sockets in Python. 1 point

With respect to this, which among the following is a valid initialization of the `server_address` object?

- a. (1223,1223)
b. ('10.12.56.34',1223)
c. ('12.56.78.221','10.12.34.56')
d. (1223,'67.34.56.7789')

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

9) Where do you store the image file of the Raspberry Pi OS before using it to execute the OS on the Pi? 1 point

- a. Over the cloud
b. Directly on the Pi motherboard
c. Inside a memory card attached to the Pi
d. OS is installed through wireless means

Yes, the answer is correct.

Score: 1

Accepted Answers:

c.

10) With which of the following remote access mechanism can you access a Raspberry Pi from your laptop computer? 1 point

- a. ssp
b. ssh
c. ssj
d. ssd

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

11) Fill in the blanks. Raspberry Pi 3 Model B has a GPU support of _____ 1 point

- a. 400 MHz video core IV
b. 250 MHz video core IV
c. Quad cortex A53@1.2GHz
d. ARM 11 @ 1 GHz

Yes, the answer is correct.

Score: 1

Accepted Answers:

a.

12) What is the data type of the variable ls in the following piece of Python code? 1 point

`ls= {1:2, 3:4, 5:6, 7:8}`

- a. dictionary
b. list
c. tuple
d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

a.

13) Consider the image as given below. 1 point

Which among the following component is highlighted within the red box in the image?

- a. Raspberry Pi
b. Raspbian
c. Raspberry Pi Camera
d. GPIO pins

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

14) Relay is a type of actuator which can be used with Arduino but not with Raspberry Pi. 1 point

- a. True
b. False

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

15) State whether the following statement is true or false. 1 point

Statement: Python allows us to only read files. Writing to files is not possible.

- a. True
b. False

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.