



Introduction to Internet

of Things Assignment-

Week 6

TYPE OF QUESTION: MCQ/MSQ

Number of questions: 15

Total marks: 15 X 1 = 15

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**QUESTION 1:**

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

- a. True
- b. False

Correct Answer: a. True

Detailed Solution: Refer Lecture 26@4:47.

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**QUESTION 2:**

Consider the following Python instruction

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

Is the above a valid Python instruction?

- a. Yes
- b. No

Correct Answer: a. Yes

Detailed Solution: Refer Lecture 26@9:10.



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**QUESTION 3:**

Which of the following is a valid conditional construct instruction in Python?

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

Correct Answer: b. elif

Detailed Solution: Refer Lecture 26@16:10.

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**QUESTION 4:**

Consider the following Python code snippet. Assume Python v3.

*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. ‘I’

c. ‘a’

d. ‘am’

Correct Answer: c. ‘a’

Detailed Solution: As per Python programming constructs. Refer Lecture 27 on Python file handling.



**QUESTION 5:**

Which of the following is a mode to open a file in Python?

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

Correct Answer: d. All of these

Detailed Solution: The four basic modes to open a file in python are –

- a. Read mode
- b. Write mode
- c. Append mode
- d. Both read and write mode

Refer to lecture INTRODUCTION TO PYTHON PROGRAMMING- II @ 03:00.

**QUESTION 6:**

What does the following line of code do?

`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)

Correct Answer: b. Turns on GPIO pin 11



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Detailed Solution: Turns on GPIO pin 11

(Please refer to lecture INTRODUCTION TO PYTHON PROGRAMMING- II @ 11:18)

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**QUESTION 7:**

What is the utility of the ‘pip’ instruction with respect to Python programming?

- 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

Correct Answer: a. To act as a package installer

Detailed Solution: Refer Lecture 27@17:14.

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**QUESTION 8:**

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

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')

Correct Answer: b. ('10.12.56.34',1223)



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Detailed Solution: Server address tuple always contains the server IP address and port number in order. Refer to Python socket programming in Lecture 27.

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**QUESTION 9:**

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

- 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

Correct Answer: c. Inside a memory card attached to the Pi

Detailed Solution: Refer Lecture 28@15:14

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**QUESTION 10:**

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

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

Correct Answer: b. ssh

Detailed Solution: Refer Lecture 28@18:00 onwards.

**QUESTION 11:**

Fill in the blanks. Raspberry Pi 3 Model B has a GPU support of \_\_\_\_\_

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

Correct Answer: a. 400 MHz video core IV

Detailed Solution: Raspberry Pi 3 Model B has a GPU support of 400 MHz video core IV.

(Please refer to lecture INTRODUCTION TO RASPBERRY PI-I @ 6:00)



**QUESTION 12:**

What is the data type of the variable ls in the following piece of Python code?

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

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

Correct Answer: a. dictionary

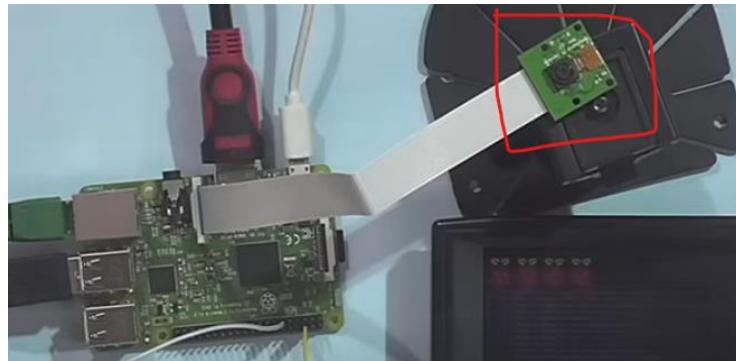
Detailed Solution: As per the basics of Python programming (Please refer to lecture

INTRODUCTION TO PYTHON PROGRAMMING- I @ 15:07).

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**QUESTION 13:**

Consider the image as given below.



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

Correct Answer: c. a.      Raspberry Pi Camera

Detailed Solution: The highlighted portion shows a standard Raspberry Pi camera module. Refer Lecture 29@17:43.



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**QUESTION 14:**

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

- a. True
- b. False

Correct Answer: b. False

Detailed Solution: Relays can be used with both Arduino as well as Raspberry Pi. They are basic IoT based actuators. Refer Lecture 30.

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**QUESTION 15:**

State whether the following statement is true or false.

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

- a. True
- b. False

Correct Answer: b. False

Detailed Solution: Python allows us to read and write files.

(Please refer to lecture INTRODUCTION TO PYTHON PROGRAMMING- II @ 01:17)