



NARASIMHA REDDY ENGINEERING COLLEGE

(Autonomous)

**Approved by AICTE, New Delhi & Affiliated to JNTUH,
Hyderabad**

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UNIT 1 : LONG QUESTIONS

- 1 What do you mean by IOT and it's features?
- 2 Explain characteristics of IOT. L2:
- 3 Describe functional blocks of IOT Architecture?
- 4 Explain features of Sensors and Actuators.
- 5 Explain various types of sensors

Short questions

- 1 What are communication protocols?
- 2 How many levels of IOT Levels are there?
- 3 Classify Computer Networks.
- 4 Differentiate between Computer Networks V/s IOT.
- 5 Define IOT architecture.

Objective questions

1. Internet of Things (IoT) can be integrated with which of these separate domains:
 - a. Cloud-based storage and computing.
 - b. Cyber Physical Systems.
 - c. Big-data networks.
 - d. All of these.
2. In the current market scenario, IoT captures the maximum share in which one of these?
 - a. Industry
 - b. Security
 - c. Healthcare
 - d. Home automation
3. Why is IPv6 preferred over IPv4 for IoT implementations?
 - a. Larger addressing range
 - b. More security
 - c. Both a and b
 - d. Neither a or b
4. The main function of the IoT Gateway can be summarized as:

a. Forwarding packets between LAN and WAN on the IP layer. b. Performs application layer functions between IoT nodes and other entities. c. Enables local, short-range communication between IoT devices. d. All of these

5. Scalability of IoT means:

a. Expandable/reducible in terms of scale or size. b. Measurable c. Increasing/decreasing monetary costs. d. All of these.

Fill in the blanks:

1. The two greatest technologies that enable users to detach themselves from desktops and go mobile are _____ and _____.

2. Global Sensor Network is built for _____.

3. The huge number of devices connected to the Internet of Things has to communicate automatically, not via humans known as _____. CSE III Yr II Sem 15

4. The number of elements in the Open IoT Architecture are _____.

5. The sensor used to measure gases or liquid is known as _____.

UNIT-II: Long Questions

1 Explain M2M Communication.

2 Differentiate between IOT and M2M.

3 Define interoperability in IOT.

4 Explain architecture of ARDIUNO Board

5 Explain integration of sensor with ARDIUNO

Short questions

1 Explain role of M2M Communication in IOT

2 Explain different types of M2M communication.

3 Explain role of Actuator interfacing in IOT.

4 Briefly explain the term interoperability.

5 Explain importance of programming in IOT.

UNIT 3

Long questions

- 1 Explain features of Python Language
- 2 Write program to interface LED with Raspberry Pi Board.
- 3 Explain pin diagram of Raspberry Pi Board.
- 4 Discuss data types in Python with examples.
- 5 Enumerate on Raspberry Pi interfaces.

Short questions

- 1 Who invented Python Language ?
- 2 Which kind of language Python is ?
- 3 Explain role of Raspberry in IOT.
- 4 Explain role of Arduino in IOT.
- 5 Explain toggling in IOT.

MCQ'S

1. Who developed the Python language?
a. Zim Den b. Guido van Rossum c. Niene Stom d. Wick van Rossum
2. In which year was the Python language developed?
a. 1995 b. B.1972 c. 1981 d. 19893.
3. Which character is used in Python to make a single line comment?
a. / b. // c. # d. !

4. The Raspberry Pi is defined as the?

- a.. Mini computer b. Micro Computer c.. Mega Computer d.. Nano Computer

5. Which of the following is not a types of Raspberry Pi?

- a.. Raspberry Pi Alternatives b. Raspberry Pi Zero W c.. Raspberry Pi 3 Model B+
d.. Raspberry Pi 3 Model A+

Fill in the blanks:

1. _____ is used to connect TV to RPi.
2. _____ instruction set architecture is used in Raspberry Pi.
3. The correct extension of the Python file is _____.
4. _____ is used to define a block of code in Python language.
5. _____ is the method inside the class in python language.

UNIT 4

Long Questions

- 1 Write the difference between SDN and NFV for IOT.
- 2 What is meant by big data analytics
- 3 What is Data Handling in IOT
- 4 White a note on Hadoop system
- 5 List the Charecteristics of Data Analytics.

Short questions

- 1 List the advantages of big data analytics
- 2 Explain features of Data Handling
- 3 Enumerate on importance of SDN.
- 4 Explain steps involved in implementation of IOT with Raspberry Pi.

5 Write importance of software in IOT.

MCQ'S

1. Name one value add that SDN provides for NFV:

- a) Storage allocation b) Service chaining c) Alarms d)None

2. What are the 3 layers that make up SDN?

a.1) The network layer, 2) The physical layer, and 3) The transport layer

b.1) The application layer, 2) The control layer, and 3) The physical layer

c.1) The application layer, 2) The transport layer, and 3) The network layer

d.1) The transport layer, 2) The network layer, and 3) The datalink layer

3. Which of the following are true about SDN Controller? (Choose 2 best answers)

- a.. Manages flow control to the switches/routers 'below' (via southbound APIs)
- b.. Manages applications and business logic 'above' (via northbound APIs) to deploy intelligent networks.
- c.. Open Flow is used to communicate with the networking devices via southbound APIs
- d.. It is used to collect information about networking devices using SNMP.

4. What are the five V's of Big Data?

- a. Volume b. Velocity c. Variety d. All the above

5. What are the different features of Big Data Analytics?

- a. Open-Source b. Scalability c. Data Recovery d. All the above

Fill in the blanks:

1. A typical representation of SDN architecture includes three layers: _____ layer, the control layer and the _____ layer.

2. In an _____, network administrators can actually shape network traffic.

3. _____ has the world's largest Hadoop cluster.
4. The main feature of Big Data Analytics is _____.
5. Face book Tackles Big Data With _____ based on Hadoop.

UNIT 5

Long questions

- 1 Illustrate on Cloud for IOT
- 2 Explain Sensor Cloud in details.
- 3 How we can build Smart Home with IOT?
- 4 How we can build Smart City with IOT?
- 5 Illustrate role of IOT in Smart Grid building

Short Questions

- 1 What do you mean by Industrial IOT.
- 2 Illustrate Industry 4.0 concept
- 3 Explain role of IOT in Health Care industry.
- 4 Explain role of IOT in Agriculture industry.
- 5 Explain how activity monitoring can be achieved in IOT.

Objective Questions

1. What type of computing technology refers to services and applications that typically run on a distributed network through virtualized resources?
a. Distributed Computing b. Cloud Computing c. Soft Computing d. Parallel Computing
2. Which of the following has many features of that is now known as cloud computing?
a. Web Service b. Softwares c. Internet d. All of the mentioned
3. Which of the following is an essential concept related to Cloud?

a. Reliability b. Abstraction c. Productivity d. All of the mentioned

4. Which of the following category is used for B2C Communication?

a. Group IOT b. Community IOT c. Personal IOT d. Industrial IOT

Fill in the blanks:

1. Cloud computing is a kind of abstraction which is based on the notion of combining physical resources and represents them as _____ resources to users.

2. Reliability is an essential concept related to _____.

3. The _____ is the Cloud Platform by Amazon.

4. The core element of architecture of smart city is _____.

5. IOT promotes the creation of IoT terminal industry _____.



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