

Q.24 Explain different types of communication models used in IOT in detail. (CO2)

Q.25 Explain various applications of IOT in details. (CO4)

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**4th Sem.**

**Branch : Artificial Intelligence & Machine Learning**

### Sub. Internet of Things

Time : 3 Hrs.

M.M. : 60

## SECTION-A

**Note: Multiple choice Questions. All Questions are compulsory. (6x1=6)**

Q.1 The standard length of the MAC address is. (CO1)

- a) 16 bits                      b) 48 bits  
c) 32 bits                      d) 8 bits

Q.2 The term IOT was coined in. (CO1)

- a) 1999                      b) 2000  
c) 1998                      d) 2001

Q.3 Through API, \_\_\_\_\_ service portability is enabled. (CO2)

- a) Device
- b) Network
- c) Services
- d) Systems

Q.4 Total elements in the open IOT Architecture is \_\_\_\_\_.

- a) 5                                      b) 6
- c) 7                                      d) 8

Q.5 Which of the following API allows the user to control electronic components? (CO2)

- a) COAPAPI                      b) MQTTAPI  
c) RESTFullAPI                d) AndroidAPI

Q.6 Which of the following IOT gateway must provide? (CO3)

- a) Protocol abstraction  
b) Security with Hardware  
c) Simple and fast installation  
d) Data storage

### SECTION-B

**Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)**

Q.7 Arduino IDE is written in which programming language? (CO2)

Q.8 I2C stands for \_\_\_\_\_. (CO1)

Q.9 An IOT network is a collection of inter-connected devices. (True/False) (CO1)

Q.10 SLA stands for \_\_\_\_\_. (CO3)

Q.11 What is java extension file in IOT? (CO2)

Q.12 Full form of “IIOT”. (CO2)

### SECTION-C

**Note: Short answer type Questions. Attempt any eight questions out of ten Questions. (8x4=32)**

Q.13 What is IOT. What are some key features of IOT? (CO1)

Q.14 Explain physical design of IOT with neat diagram. (CO1)

Q.15 Differentiate between IOT and M2M. (CO2)

Q.16 Explain design and security challenges in IOT. (CO3)

Q.17 Explain the smart home automation system in IOT. (CO4)

Q.18 Explain various functional blocks of IOT. (CO1)

Q.19 Describe about application layer protocols. (CO2)

- a) COAP                              b) MQTT

Q.20 Discuss merits and demerits of IOT. (CO1)

Q.21 Write a short note on interfacing of Actuators with arduino. (CO2)

Q.22 Explain the role of “Things” in IOT. (CO1)

### SECTION-D

**Note: Long answer questions. Attempt any two questions out of three Questions. (2x8=16)**

Q.23 What is IOT? What are the features and different type of components used in IOT? (CO1)