# MUTHAYAMMAL ENGINEERING COLLEGE



(An Autonomous Institution)

(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University) Rasipuram - 637 408, Namakkal Dist., Tamil Nadu.

# Department of Computer Science and Engineering Question Bank - Academic Year (2020-21)

Course Code & Course Name	:	<b>19CSE01-Internet of Things</b>
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Year/Sem/Sec : II / IV / B

## Unit-I: INTRODUCTION Part-A (2 Marks)

- 1. Define IoT. (CO2,K1)
- 2. Why do we need IoT? (CO2,K2)
- 3. Who is going to benefit from it? (CO2,K2)
- 4. What are the different challenges of IoT? (CO2,K4)
- 5. List out the different components required for IoT device. (CO2,K1)
- 6. State Machine to Machine communication(M2M). (CO2,K1)
- 7. Mention the IOT enabling technologies. (CO2,K1)
- 8. What constitutes IOT platforms. (CO2,K1)
- 9. Write the salient features of M2M protocol. (CO2,K1)
- 10. What are the applications of IOT? (CO1,K3)

## Part-B (16 Marks)

1.	Explain the various types of views in detail. (CO1,K4)	(16)
2.	Discuss the M2M and IOT technology fundamentals. (CO1,K2)	(16)
3.	Explain the process of IOT in Xaas. (CO1,K1)	(16)
4.	Write in detail about various stages of IOT architecture in detail. (CO1,K4)	(16)
5.	Explain the stages of IOT architecture in detail(CO1,K4)	(16)

# Unit-II : IoT PROTOCOLS

## Part-A (2 Marks)

- 1. What is the role of Data lake? (CO2,K1)
- 2. Define Operational view (CO2,K1)
- 3. Differentiate the types of views (CO2,K2)
- 4. What are the technical design constraints in IOT architecture? (CO2,K6)
- 5. Define Data Representation (CO2,K1)
- 6. List the technical design constraints in IOT architecture. (CO2,K2)

- 7. State Functional view. (CO2,K1)
- 8. Define visualization. (CO2,K1)
- 9. What is meant by Deployment view? (CO2,K1)
- 10. Define informational view. (CO2,K1)

### Part-B (16 Marks)

1.	Write in detail IOT architecture in detail with neat diagram(CO2,K4)	(16)
2.	Briefly explain the IOT reference architecture with diagram(CO2,K2)	(16)
3.	Explain the IOT reference model and architecture.(CO2,K4)	(16)
4.	Briefly explain about architectural overview of IOT(CO2,K1)	(16)
5.	Explain the types of views in detail(CO2,K6)	(16)

#### Unit-III : WEB OF THINGS Part-A (2 Marks)

- 1. Define Processes (CO3,K1)
- 2. State Data Management security(CO3,K1)
- 3. List out IOT Applications(CO3,K3)
- 4. What are the Security issues of IOT(CO3,K1)
- 5. State the Future Internet Technologies(CO3,K1)
- 6. Define IoT Eco system(CO3,K1)
- 7. What are the different types of IoT enabling Technologies(CO3,K6)
- 8. Difference between IoT and Cloud(CO3,K2)
- 9. Define RFID System(CO3,K1)
- 10. What are the privacy issues of IOT(CO3,K1)

#### Part-B (16 Marks)

1.	Write short note on IoT strategic research and innovation directions. (CO3,K4)	(16)
2.	Analyze the concept on IoT today (CO3,K4)	(16)
3.	Is IoT called future Internet Technologies? Justify your answer with the help of example. (CO3,K6)	(16)
4.	Explain detail about Device level energy issues with neat diagram. (CO3,K2)	(16)
5.	Discuss detail about Future Internet Technologies (CO3,K4)	(16)

## Unit-IV : IoT BUSINESS MODELS Part-A (2 Marks)

- 1. Compare Governance and Privacy(CO4,K1)
- 2. List out IOT platforms? (CO4,K3)
- 3. List any two IOT in Smart Cities(CO4,K3)
- 4. What is Smartie Approach? (CO4,K1)

- 5. Predict the properties of automatic IoT systems(CO4,K1)
- 6. What is role of Cloud Computing and Big Data in Internet of Things. (CO4,K5)
- 7. State Data Aggregation(CO4,K1)
- 8. Write the examples of Governance, Privacy, Security (CO4,K2)
- 9. Define FP7. (CO4,K1)
- 10. Can iot work without internet(CO4,K1)

#### Part-B (16 Marks)

- Explain the detail about Security, Privacy, and trust in IoT data platform for smart (16) cities (CO4,K1)
  Write short notes on Smartie Approach (CO4,K2) (16)
- 3. Explain the smart transportation application from smart city aspect. (CO4,K4) (16)
- 4. Analyze the concept on overview of governance, Privacy (CO4,K4) (16)
- 5. Explain Smart City IoT platform. What are the risks to Smart City IoT Platform? (16)

# Unit-V : APPLICATIONS

#### Part-A (2 Marks)

- 1. State Brownfield IOT? (CO 5, K1)
- 2. Write short notes on e-Health(CO 5, K6)
- 3. Point out the challenges faced by IoT industry applications. (CO5,K3)
- 4. Serialization role in IoT. (CO5,K1)
- 5. Mention the IoT Application Requirements. (CO5,K1)
- 6. Identify the Aspects in Business to Master IoT. (CO5,K1)
- 7. What is meant by IIoT? CO5,K1)
- 8. Define smart home platform.(CO5,K2)
- 9. Identify the needs in IoT in e-Health(CO5,K1)
- 10. Discuss about IoT for Retailing Industry.(CO5,K2)

#### Part-B (16 Marks)

Explain future factory concept. (CO5,K1) (16)
 Discuss the Aspects in Business to Master IoT. (CO5,K2) (16)
 Analyze the Oil and Gas industry use case for IoT. (CO5,K4) (16)
 Explain the detail about Value creation from Bigdata Serialization. (CO5,K6) (16)
 Discuss about IoT for Retailing Industry with example. (CO5,K2) (16)