



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

B.Tech VI Semester End Examinations (Regular), November – 2020

Regulation: IARE–R16

## INTERNET OF THINGS

(CSE | IT)

**Time: 2 Hours**

**Max Marks: 70**

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**Answer any Four Questions from Part A**

**Answer any Five Questions from Part B**

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### PART – A

1. Explain in detail about various IoT enabling technologies. [5M]
2. What is the need of IoT system management? [5M]
3. Write a detailed note on packages in python? [5M]
4. Evaluate the steps to controlling LED with Raspberry Pi using python. [5M]
5. Discuss in detail about weather reporting bot. [5M]
6. Describe about IoT Level-1 and IoT Level-3. [5M]
7. Explain in detail about M2M with a block diagram. [5M]
8. List the various steps for installing a python. [5M]

### PART – B

9. Describe briefly about physical design of IoT with interoperable communications Protocols. [10M]
10. Write short notes on smart grid, renewable energy systems and prognostics? [10M]
11. Compare and contrast software defined networks and network function virtualization for IoT. [10M]
12. Recall the concept of network function virtualization for IoT. [10M]
13. Explain the various stages of IoT architecture and compare the differences of all the stages. [10M]
14. List and explain various python data types & data structures with exxamples. [10M]
15. Discuss in detail about sensing, actuation and communication, analysis process of IoT. [10M]
16. Explain in detail about interfacing a light display sensor (LDR) with Raspberry Pi. [10M]
17. Develop a case study for illustrating IoT design of smart lightning in home automation. [10M]
18. Explain about service and deployment models used in IoT cloud? Write in detail about various API's used in IoT Cloud? [10M]