[6004]-717
B.E.(Honors)
INTERNET OF THINGS SECURITY
(410603) (2019 Pattern) (Semester-VIII)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates :
1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
2) Neat diagrams must be drawn wherever necessary.
3) Figures to the right indicate full marks.
4) Assume suitable data, if necessary.

Q1) a) Explain in detail-Security Goals in IoT.   [6]

b) What is Public-Key-Based Authentication? Explain with suitable example.
                                                              [6]

c) Explain - Existing Security Schemes for IoT.   [5]

OR

Q2) a) What is Identity-Based Authentication? Explain with suitable example.[6]

b) Explain CoAP protocol for the IoT environment.   [6]

c) What is Lightweight Cryptography? Explain with example.   [5]

Q3) a) Explain the data life cycle in IoT, with suitable example.   [6]

b) How can we protect data in IoT? Which parameters are used to protect the data in IoT?   [6]

c) How can security be provided in the Network Layer of IoT Architecture?
                                                              [6]

OR

Q4) a) How can security be provided in the Service Layer IoT Architecture?[6]

b) What are the Threats Caused in Maintenance of IoT?   [6]

c) How can security be provided in the Application Interface Layer of IoT Architecture?   [6]

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Q5) a) How to provide Security in Identification and Tracking Technologies? Explain with suitable example. **[6]**

b) List and explain main potential attacks in 6LoWPAN. Discuss security protocols and privacy issues in 6LoWPAN. **[5]**

c) Using which security schemes information in Wireless Sensor Networks (WSNs) can be protected? **[6]**

OR

Q6) a) What are the security attacks in WSNs? How to avoid them? **[6]**

b) What are the threats and challenges to achieve security in the - identification and tracking technologies of the IoT Environment. **[5]**

c) How do you maintain confidentiality and security for IoT based health care applications? **[6]**

Q7) a) How can security be provided in Smart Cities? **[6]**

b) What can be the security threats to the Connected Cars? How can security be provided to Connected Cars? **[6]**

c) How can Blockchain Technology be used in the Security and Privacy in IoT? **[6]**

OR

Q8) a) Describe blockchain enabled food supply chain traceability system in detail. **[6]**

b) Comment on "Blockchain in IoT". **[6]**

c) Briefly discuss the case study on "Smart Home". **[6]**

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