

Total No. of Questions : 8]

SEAT No. :

PB-4025

[Total No. of Pages : 2

[6262]-378

T.E. (Computer Engineering) (Honors)

INTERNET OF THINGS

**Internet of Things Architectures, Protocols and
Systems Programming**

(2019 Pattern) (Semester - II) (310603)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Assume suitable data, if necessary.*
- 4) *Use of Non-Programmable scientific Calculators is allowed*

- Q1)** a) Describe in brief transport layer protocols. [6]
b) Explain in detail DCCP. [6]
c) Describe in detail SCTP [5]

OR

- Q2)** a) Explain the working of DTLS. [6]
b) Explain in brief session layer protocols. [6]
c) Explain in detail CoAP [5]

- Q3)** a) Explain in detail vulnerabilities security requirements and threat analysis. [6]
b) What is IoT Security Tomography? Explain. [6]
c) Describe IoT layered attacker model in detail. [6]

OR

P.T.O.

- Q4)** a) Describe Identity Management and Establishment in detail. [6]
b) Describe IoT Security Models. [6]
c) Explain in brief IoT Security Protocols [6]

- Q5)** a) Describe the components of Arduino [6]
b) Describe the role of Web/Cloud Services for IoT development. [6]
c) Explain the use of APIs. [5]

OR

- Q6)** a) Describe the components of Raspberry Pi. [6]
b) Explain essential features of web APIs. [6]
c) Describe the components of Intel Galileo [5]

- Q7)** a) Describe the role of IoT for Home Automation [6]
b) Describe the role of IoT for Agriculture applications. [6]
c) Describe the role of IoT for Telecom/5G. [6]

OR

- Q8)** a) Describe role of IoT for Smart Cities development. [6]
b) Describe the role of IoT for Industry. [6]
c) Describe the role of IoT for Health and Lifestyle [6]
