

Total No. of Questions - [8] Paper Code: Total No. of Printed Pages:[2]

G.R. No.

U359-115 (ESE) Civil U359-125 (ESE) Comp
U359-145 (ESE) IT U359-155 (ESE) Mech
U359-135 (ESE) G89C

DECEMBER 2019/ENDSEM

T. Y. B. TECH. (COMPUTER ENGINEERING) (SEMESTER - I)

COURSE NAME: INTERNET OF THINGS

COURSE CODE: IE31175CS

(PATTERN 2017)

Time: [2 Hours]

[Max. Marks: 50]

(I) Instructions to candidates:

- 1) Answer Q.1, Q.2, Q.3, Q.4, Q.5 OR Q.6, Q.7 OR Q.8
- 2) Figures to the right indicate full marks.
- 3) Use suitable data wherever required

Q.1) a) Design and explain deployment level three IoT System with [6]
suitable example.

OR

- b) Write the two applications of IoT in each of the following field. [6]
- a) Agriculture
 - b) Medical field
 - c) Industry

Q.2) a) Draw the protocol stack for IoT and compare the Traditional [6]
Networking Protocols with IoT Protocols

OR

- b) Explain the following in Bluetooth technology. [6]
- i) Bluetooth range for different classes.
 - ii) Connection Establishment in Bluetooth.

Q.3) a) Compare the capabilities of Arduino and Raspberry Pi [6]

OR

- b) Write a program to design the traffic control system using [6]
arduino or Raspberry PI

Q.4) a) Write any 4 Vulnerabilities of IoT [4]

OR

b) How threat analysis can be performed for smart phone [4]

Q.5) a) Explain system oriented architecture in cloud computing. [6]

b) Write a short note on mobile cloud computing. [4]

c) List the 4 deployment models of Cloud, explain any one of them. [4]

OR

Q.6) a) Draw and explain fog computing architecture. [6]

b) What the Challenges and issues are in cloud Computing. [4]

c) Why fog computing is required. [4]

Q.7) a) Design the system for Home Intrusion Detection [6]

b) Design the system for smart health care. [4]

c) Design the system for smart vehicle parking. [4]

OR

Q.8) a) Design the system for Air Pollution Monitoring, [6]

b) Design the system for Smart Irrigation [4]

c) List the components required to design the infant monitoring system. [4]