[5670]-604

B.E. (E & TC)

INTERNET OF THINGS

(2015 Pattern) (Semester - I) (Elective - I) (404184D) (End Sem.)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

1) *Neat diagrams must be drawn wherever necessary.*
2) *Figures to the right side indicate full marks.*

Q1) a) What are enabling technologies in IoT? Describe any two. **[8]**

b) Explain any one Wireless Sensor Network application. **[6]**

c) Explain working of Zigbee protocol. **[6]**

OR

Q2) a) Compare IoT and M2M services **[6]**

b) What is difference between sensor and Transducer? Give examples of each. **[8]**

c) What is Bluetooth Low Energy? Explain its architecture. **[6]**

Q3) a) What is REST protocol? Explain characteristics of REST based API.**[8]**

b) Explain CoAP messaging format. **[8]**

OR

Q4) a) Explain IPv6 packet format in detail. **[8]**

b) What is MQTT? Describe components and methods in MQTT. **[8]**

Q5) a) What is term Big Data in IoT? Elaborate various challenges in Big Data.

[8]

b) Explain types of Data Analytics in detail. **[9]**

OR

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Q6) a) What are various types of Big Data? Explain any one in detail. **[9]**

b) What is precision? Explain different types of errors. **[8]**

Q7) a) Explain Smart home and smart city applications in view of IoT. **[8]**

b) What are IoT design ethics, explain? **[9]**

OR

Q8) a) What are applications of IoT in agriculture field? Explain any one case study. **[9]**

b) Write a note on Industrial IoT. **[8]**

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