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Question Paper Code: 59415

B.E./B.Tech. DEGREE EXAMINATION, NOV 2019

Elective

Electronics and Communication Engineering

15UEC915–INTERNET OF THINGS

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Which one of the following is being used by Internet of Things? CO1 R
(a) Radio identification technology (b) Cable (c) Satellite (d) Broadband
2. How many numbers of elements in the Open IoT Architecture? CO2- U
(a) 6 elements (b) 8 elements (c) 7 elements (d) 3 elements
3. Global Sensor Network is built for _____ CO3- R
(a) Reducing cost and time for development
(b) Reducing cost and increasing time for development
(c) Increasing cost and increasing time for development
(d) Increasing cost and decreasing time for development
4. IoT security management includes _____ CO4- R
(a) Protocol abstraction (b) Simple and fast installation
(c) Security with hardware (d) Data storage
5. Who will use their own IoT business models? CO5- R
(a) PaaS (b) SaaS (c) IaaS (d) Service provider

PART – B (5 x 3= 15Marks)

6. Why do we need Internet of Things? CO1- R
7. List out the functions of device intelligence in IoT. CO2- R

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|-----|---|--------|--|
| 8. | Discuss various components of RFID system. | CO3- R | |
| 9. | Write a note on Vulnerabilities of IoT. | CO4- R | |
| 10. | What impacts will the IOT have on health care sector? | CO5- R | |

PART – C (5 x 16= 80Marks)

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| 11. | (a) (i) Explain in detail the architecture of Internet of Things. | CO1- U | (12) |
| | (ii) Write the applications of Internet of Things. | CO1- U | (4) |
| | Or | | |
| | (b) Describe briefly the Internet of Things Frameworks. | CO1- U | (16) |
| 12. | (a) Explain Environment and Traffic characteristics of Internet of Things. | CO2- U | (16) |
| | Or | | |
| | (b) Describe the following Key IoT Technologies. | CO2- U | (16) |
| | (i) Satellite Technology | | |
| | (ii) Device Power | | |
| 13. | (a) Explain the design guidelines and technological challenges for Internet of Things. | CO3- U | (16) |
| | Or | | |
| | (b) Draw the architecture of wireless sensor networks and explain the functions of each component. | CO3- U | (16) |
| 14. | (a) What is threat analysis in Internet of Things? Explain in detail the threat analysis. | CO4- U | (16) |
| | Or | | |
| | (b) Why security required in IOT? Explain in detail various security model in Internet of Things. | CO4- U | (16) |
| 15. | (a) How the Internet of Things changes business models? Explain. | CO5- U | (16) |
| | Or | | |
| | (b) Explain briefly the application of internet of Things in home automation. | CO5- U | (16) |