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Reg. No. : | | | | | | | | | | |

Question Paper Code: 59276A

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

Open elective

Civil Engineering

15UCS976 - INTERNET OF THINGS

(Common to ECE, EEE, EIE, Mechanical, IT, Chemical)

(Regulation 2015)

Duration: Three hours | Maximum: 100 Marks

Answer ALL Questions

PART A - (5x 1 = 5 Marks)

1. An interconnected collection of piconet is called_____. CO1- R

   (a) Scatter net (b) Micro net (c) Mini net (d) None of the above

2. Which of the following is not a version of Arduino? CO2- R

   (a) Tre (b) Galileo (c) Zero (d) Leonardo

3. Which board is first to use microcontroller with in build USB? CO3- R

   (a) LilyPad (b) UNO (c) RedBoard (d) Leonardo

4. _____ is a web standardized REST ful model for interacting with collections. CO4- R

   (a) Sunspot (b) Atom (c) Comet (d) Proton

5. Which action sequences are used to achieve the agent's goal? CO5- R

   (a) Search (b) Plan (c) Reterive (d) Both a & b.

PART – B (5 x 3= 15 Marks)

6. Name the components of IoT and explain any one. CO1-U

7. Design an Arduino sketch to display your name in the serial monitor. CO2- Ana

8. Define open source development. CO3- R

9. Why is a REST ful web service essential in IoT? CO4- R

10. Define data synchronization. CO5- U

PART – C (5 x 16= 80Marks)

11. (a) Explain the detail about Cellular Networks in Internet of things. CO1- U (16)

Or

(b) Explain the various components available in Internet of Things (IoT**).** CO1- U (16)

12. (a) Write a program for the demonstration of MsTimer2 library and Metro Timer library. CO2- Ana (16)

Or

(b) Explain the working principles of different kinds of sensors and actuators. CO2- U (16)

13. (a) Explain the working principles of different kinds of HW based solution. CO3- U (16)

Or

(b) Explain the functionalities of towards a participatory approach. CO3- U (16)

14. (a) Discuss about the Representing Resources in RESTFUL Smart things. CO4- U (16)

Or

(b) Briefly explain about the Web - enabling Constrained Devices. CO4- U (16)

15. (a) Discuss data synchronization in different types of IoT Network architectures with neat diagrams. CO5- U (16)

Or

(b) Discuss data synchronization in different types of IoT Network architectures with neat diagrams. CO5-U (16)