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**Question Paper Code: 59276**

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Open elective

Civil Engineering

15UCS976 - INTERNET OF THINGS

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

(Regulation 2015)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

**(Answer any six of the following questions)**

1. The Bluetooth supports CO1- R
  - (a) point-to-point connections
  - (b) point-to-multipoint connection
  - (c) both (A) and (B)
  - (d) None
2. What does a Hall Effect sensor sense? CO1- R
  - (a) Temperature
  - (b) Moisture
  - (c) Magnetic fields
  - (d) Pressure
3. The USB device follows \_\_\_\_\_ structure CO2- R
  - (a) List
  - (b) Huffmann
  - (c) Hash
  - (d) Tree
4. Data rate available for use on USB is \_\_\_\_\_. CO2- R
  - (a) 12 Mbits per second
  - (b) 1.5 Mbits per second
  - (c) Both (A) and (B)
  - (d) No restriction
5. What does p refer to in ATmega328p? CO3- R
  - (a) Production
  - (b) Pico-Power
  - (c) Power-Pico
  - (d) Programmable on chip
6. Arduino shields are also called as \_\_\_\_\_. CO3- R
  - (a) Extra peripherals
  - (b) Add on modules
  - (c) Connectivity modules
  - (d) Another Arduinos

7. \_\_\_\_\_ can be used to retrieve the operations allowed on a resource. CO4- R
- (a) GET                      (b) PUT.                      (c) OPTIONS                      (d) DELETE
8. Which of the following header of HTTP response sets expiration date and time of caching? CO4- R
- (a) Date                      (b) Last Modified                      (c) Cache-Control                      (d) Expires.
9. Which of the following clustering requires merging approach? CO5- R
- (a) Partitional      (b) Hierarchical.      (c) Naive Bayes                      (d) None of the Mentioned.
10. Which action sequences are used to achieve the agent's goal? CO5- R
- (a) Search.      (b) Plan.                      (c) Retrieve.                      (d) Both a & b..

PART – B (3 x 8= 24 Marks)

**(Answer any three of the following questions)**

11. Explain the various components available in Internet of Things (IoT)? CO1- U      (8)
12. Assume that you are deploying a medical IoT. Develop an Arduino sketch to implement a Ethernet client and server to transfer clinical data captured with sensors. Illustrate the communication with a neat schematic diagram. CO2- Ana      (8)
13. Write an Arduino sketch for reading RFID Tags using the Serial Protocol. CO3- Ana      (8)
14. Briefly explain about the Servicing through a Uniform Interface in RESTful Smart Things. CO4- U      (8)
15. Discuss data synchronization in different types of IoT Network architectures with neat diagrams. CO5- U      (8)