C

Answer ALL Questions

PART A - (5x 1 = 5 Marks)

1. The Bluetooth supports_____.   CO1- R

    (a) point-to-point connections   (b) point-to-multipoint connection

    (c) both (A) and (B)   (d) none of the mentioned

2. 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

3. How many digital pins are there in the UNO board?   CO3- R

    (a) 14   (b) 12   (c) 16   (d) 20

4. _____ specifies the function that will be called when there is a   CO4- R
   new message received from the channel.

    (a) Reconnect   (b) Error   (c) Connect   (d) Callback

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. Develop the arduino code for controlling a LED's state through a Digital port. CO2- R

8. Define open source development.   CO3- R

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

10. What do you mean by transaction property?   CO5- U

PART – C (5 x 16= 80Marks)

11. (a) Explain the following communication technologies. (IoT)?   CO1- U   (16)
         (i) Zigbee   (ii) RFID   (iii) wifi   (iv) RFlink

                                    Or

    (b) Explain the functionalities of the mobile internet and wired   CO1- U   (16)
         communication in IoT.

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

                                    Or

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

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

                                    Or

    (b) Explain   the   functionalities   of   Arduino   board   CO3- C   (16)
         (ATmega168/ATmega328, Lily pad microcontroller with neat
         diagram.

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

                                    Or

    (b) Explain the basic concept of future of web things.   CO4- U   (16)

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

                                    Or

    (b) Explain the following the concept of The Role of context and   CO5-U   (16)
         design guidelines in IoT.

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