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Question Paper Code: 49211

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2018

Elective

Computer Science and Engineering

14UCS911 – INTERNET OF THINGS

(Regulation 2014)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

1. To join the internet, the computer has to be connected to a

   (a) Internet architecture board   (b) Internet society
   (c) Internet service provider   (d) None of these

2. Bluetooth is the wireless technology for

   (a) local area network   (b) personal area network
   (c) both (a) and (b)   (d) None of these

3. The blue tooth supports

   (a) point-to-point connections   (b) point-to-multipoint connection
   (c) both (a) and (b)   (d) None of these

4. A Wi-fi enabled device can be

   (a) PC   (b) Game Console
   (c) Mobile Phone   (d) All the above

5. Which kind of agent architecture should an agent an use

   (a) Relaxed   (b) Logic   (c) Relational   (d) All the above

6. What is used for tracking uncertain events?

    (a) Filtering algorithm   (b) Sensors

    (c) Actuators   (d) None of these

7. An RPC application requires

    (a) specific protocol for client server communication

    (b) a client program

    (c) a server program

    (d) all the above

8. Relationship between vocabulary to represent different concepts is classified as

    (a) dictionary   (b) thesaurus   (c) glossary   (d) all the above

9. The huge numbers of devices connected to the internet of things have to communicate automatically, not via humans. What is this called

    (a) Machine to Machine (M2M)   (b) Bot to Bot (B2B)

    (c) Skynet   (d) Intercloud

10. The internet of things needs a lot of network connections. What is the proposed 'white space' radio standard called

    (a) Bluetooth   (b) Wimax   (c) Weightness   (d) None of these

PART - B (5 x 2 = 10 Marks)

11. List the challenges and issues of IoT.

12. Differentiate sensors with actuators.

13. Define the fundamental concepts of agility and autonomy.

14. Write the impacts of Business Models in IOT.

15. Write a few words about RESTful Web Services.

PART - C (5 x 16 = 80 Marks)

16. (a) (i) Describe the various phases of internet of things.   (8)

      (ii) List the components in internet of things and explain with suitable diagrams.

                                                                 (8)

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(b) Explain the concepts and terminologies any three wireless communication technologies and distinguish the wireless communication technologies with wired communication technologies. (16)

17. (a) Discuss how the communication is possible among Microcontrollers with Mobile Devices and Bluetooth USB with Internet. (16)

Or

(b) Write the steps to create communication for IoT devices based on the following scenario:

(i) Connecting microcontroller with mobile devices

(ii) Communication through bluetooth and USB

(iii) Connection with the internet using WiFi

(iv) Connection with the internet using ethernet (16)

18. (a) Explain the clustering principles in an internet of things architecture. (16)

Or

(b) Explain the role of IOT for increased Agility and Autonomy in Production. (16)

19. (a) Discuss in detail about the contributions of Semantic Web Ontology for IOT. (16)

Or

(b) (i) Write the roles of Diy in Internet of things. (8)

(ii) Explain the need of Middleware Technologies in Diy of IOT. (8)

20. (a) Discuss about the Resource Oriented Architecture for Web of Things with IOT. (16)

Or

(b) Discuss the Case studies for Open Source e-Health sensor platform, identify the roles of IT and Web of things in their regular operations. (16)

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