Reg. No. :

Question Paper Code: 49211

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

Elective

Computer Science and Engineering

14UCS911 – INTERNET OF THINGS

(Regulation 2014)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

1. NFC means

   (a) Near Field Communication   (b) New Fibre Communication
   (c) Network Free Communication   (d) Network Fibre Communication

2. The vision of the future internet of things includes extended internet of things information services based on the _____ information services.

   (a) EPC   (b) TDS   (c) TDT   (d) ONS

3. _____ is a board term, used to describe a design philosophy and a variety of methods in which the needs, wants and limitations of end users are placed at the centre of attention at each stage of the design process.

   (a) UCD   (b) UML   (c) UCSD   (d) PCD

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. Mode of data transfer in FTP, _____.

    (a) Stream mode   (b) Block mode   (c) Compressed mode   (d) packet

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. In RPC 'P' Stands for

    (a) Programme   (b) Procedure   (c) Pattern   (d) Priority

                    PART - B (5 x 2 = 10 Marks)

11. Name few sensors with its use.

12. Differentiate sensors with actuators.

13. Define the fundamental concepts of agility and autonomy.

14. What is Device Integration?.

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)

                            Or

49211

(b) Explain in detail about IOT Architecture with neat Diagram. (16)

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

Or

(b) Explain the working principles of sensors and actuators with suitable examples (16)

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

Or

(b) Recommend the Technical Requirements for Satisfying the New Demands in Production. (16)

19. (a) List the Application of Ontology Engineering in the Internet of Things and Explain. (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) Design any one important vertical IoT applications with its design specifications and technical implementations with needed diagrams. (16)

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