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**Reg. No. :**

**Question Paper Code: 49022**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Seventh Semester

Computer Science and Engineering

14UCS911-INTERNET OF THINGS

(Regulation 2014)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Which amongst the following is not one of the concerns of the Internet of Things?

(a) Cyber security (b) Data storage standards (c) Efficiency (d) Privacy Concern

2. Each device connected to the interent of things will have

(a) Different execution process (b) Unique IP address

(c) Multiple IP address (d) Same nomenclature

3. Which of this is not a valid datatype in arduino?

(a) Void (b) Word (c) String (d) Short

4. IoT is built on

(a) Cloud computing (b) Networks of data gathering sensors (c) Both of these (d) None of these

5. Which activity in Resource management tackles dynamic nature of IoT systems

(a) Resource monitoring (b) Resource allocation meters

(c) Resource discovery (d) Resource estimation

6. When do we call the states are safely explorable?

(a) A goal state is unreachable from any state(b) Goal state is denied access (c) A goal state is reachable from every state (d) None of the mentioned

7. Which One is a Common Characteristic Of Diy Activity.

(a) Connecting (b) Taking Control (c) Diversification (d) Heterogenity

8. A \_\_\_\_\_ is an amateur that pursues activities out of the love for it, but at the same

time setting a professional standard.

(a) Pro-Am (b) Lead user (c) Bricoleur (d) Local warm expert

9. Which are necessary for an agent to solve an online search problem?

(a) Actions (b) Step-cost function (c) Goal-test (d) All of the mentioned

10. IPv6 addressed have a size of

(a) 32 bits (b) 64 bits (c) 128 bits (d) 265 bits

PART - B (5 x 2 = 10 Marks)

11. Define Internet of Things.

12. Differentiate Sensors and Actuators.

13. Define and list the types of clusters.

14. What is meant by semantic web?

15. How do you relate Internet of Things to Web of Things?

PART - C (5 x 16 = 80 Marks)

16. (a) Discuss the foundation of IoT in detail. (16)

Or

(b) Describe the following communication technologies with its key aspects

(i) RFID. (8)

(ii) Zigbee. (8)

17. (a) Explain in detail about Arduino Microcontroller platform and its board set up. (16)

Or

(b) Discuss the working principles of sensors and actuators and demonstrate with

any one example. (16)

18. (a) Interpret agent based Internet of Things with an example. (16)

Or

(b) Explain the design guidelines for efficient clustering process. (16)

19. (a) A trader has to deploy a DiY based WSAN for selling agricultural products.

Propose a suitable architecture for the same and describe the role of different

elements of the network with neat diagrams. (16)

Or

(b) Discuss semantic web and its applications. (16)

20. (a) Explain in detail about Web-enabling Constrained Devices. (16)

Or

(b) Assume that you are deploying a smart city IoT. How the devices are resource

constrained in your IoT? How will you web-enable them? Explain with suitable

illustrations and sketches. (16)