Reg. No. :

Question Paper Code: 42241

M.E. DEGREE EXAMINATION, MAY 2015.

Second Semester

Computer Science and Engineering (with specialization in networks)

14PNE201- ARCHITECTING INTERNET OF THINGS

(Regulation 2014)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions.

PART A - (5 x 1 = 5 Marks)

1. Which is not a subject guidelines used to trigger successful and sustainable contributions to the internet of things
    (a) Envision   (b) Enable   (c) Execute   (d) Evaluate

2. How object is classified according to creator and purpose?
    (a) Self mode   (b) Ready made
    (c) Self mode and Ready mode   (d) none of them

3. Out of which is a software prototyping platform
    (a) iStud   (b) Pachube   (c) d.toolkit   (d) Lego system

4. Which is a not a layer in Smart gateway communication
    (a) Markup layer   (b) Mashup layer
    (c) Gateway layer   (d) Sensing layer

5. Which approach is used to support operations and provide resilience to have intermittent or reliable network connectivity?
    (a) clustering   (b) software agents
    (c) data synchronization   (d) all the above

PART - B (5 x 3 = 15 Marks)

6. Explain the phased approach from the internet of things to a future vision on the internet of things.

7. Discuss about massive city data for optimal traffic behavior.

8. What are the problem and challenges in toolkit approach?

9. What is the role of web hooks in things calling back?

10. How the objects are represented using software agents.

PART - C (5 x 16 = 80 Marks)

11. (a) Explain the possible architecture for the future internet of things. (16)

Or

(b) Explain the impact of programmer's idea of man, steps and challenges for its recognition in system design. (16)

12. (a) What are the types of call – out internet of things and explain them. (16)

Or

(b) Explain the phenomena of internet of things in candidate enabling concept. (16)

13. (a) How do you view the toolkit approach towards a participatory approach using five different approaches? Explain. (16)

Or

(b) (i) Compare the existing hardware based toolkits in different aspects. (8)

(ii) Compare the software based prototyping platforms. (8)

14. (a) What are the design factors to design RESTful smart things. Explain. (16)

Or

(b) (i) Explain the mashup editor for Smart home. (8)

(ii) Explain the architecture of RESTful EPICS in business intelligence mashup guidelines. (8)

15. (a) Explain the concept of clustering for scalability and write down the design guidelines. (16)

Or

(b) (i) What are the types of network architectures in data synchronization? (8)

(ii) What are the requirements and challenges in data synchronization? (8)

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