Reg. No. :

# **Question Paper Code: 52241**

M.E.DEGREE EXAMINATION, JUNE 2016

Second Semester

Computer Science and Engineering (with Specialization in Networks)

15PNE201 - INTERNET OF THINGS

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A -  $(5 \times 3 = 15 \text{ Marks})$ 

- 1. List the key goals to be achieved from a future Internet of things architecture.
- 2. Interpret the meaning of DiY in the network society.
- 3. Show the advantage of open-source development for IoT.
- 4. Point out the significance of web hooks.
- 5. Summarize clustering in the context of IoT.

PART - B (5 x 14 = 70 Marks)

6. (a) Describe a phased approach for movement from the current intranet / extranet of things to a future internet of things and people. (14)

Or

- (b) Discuss the overlapping of the internet of things with other fields of research. (14)
- 7. (a) With a neat diagram explain the typology of DiY creation in the internet of things.

(14)

8. (a) Summarize the user-centred design principles and activities and participatory design.

(14)

# Or

- (b) Describe the concept of living lab. (14)
- 9. (a) Explain how resource representation formats make it much easier for a decentralised system of clients and servers to interact without the need for individual negotiations. (14)

## Or

- (b) With a neat diagram show how web and internet are integrated with smart gateways and other techniques. (14)
- 10. (a) Access the challenges in providing synchronisation so that data access on demand and data consistency, are provided. (14)

### Or

(b) Develop a simple algorithm for demonstrating how global knowledge can be obtained from localised association procedures. (14)

PART - C 
$$(1 \times 15 = 15 \text{ Marks})$$

11. (a) (i) Tabulate the requirements for end-user in a commercial scenario which uses IoT. (15)

Or

(b) Design an architecture using the arduino board for providing temperature control through IoT. Discuss the modules and methods for implementing the same. (15)