

# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

#### M.Sc. DEGREE EXAMINATION - COMPUTER SCIENCE

# THIRD SEMESTER - NOVEMBER 2017

## 16PCS3ES04 - INTERNET OF THINGS

Date: 10-11-2017 Dept. No. Max. : 100 Mar	Date: 10-11-2017	Dept. No.		Max.: 100 Mark
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Time: 09:00-12:00

### **SECTION-A**

# ANSWER ALL THE QUESTIONS:

 $(10 \times 2 = 20)$ 

- 1. List out Gartner usage models for IOT.
- 2. Write any four features of micro cloud to implement IOT applications
- 3. Mention any four international standard organizations of IOT.
- 4. Define data pseudonymization.
- 5. Mention any two differences between IPv4 and IPv6.
- 6. Write any two challenges of IOT6.
- 7. Write the main focus of iCORE project
- 8. List the planes of Open IOT middleware.
- 9. Who developed IPv6 architecture for low power sensor network?
- 10. What is TmoteSKY platform?

#### **SECTION-B**

#### **ANSWER ALL THE QUESTIONS:**

(5 X 8 = 40)

11. (a) Write the fundamental characteristics of IOT.

(OR)

- b) Explain the required modules functional view of IOT.
- 12. a) Write the definition of IOT in terms of ITU and IERC.

(OR)

- (b) Discuss the IEC standardization process cycle with a neat diagram.
- 13. a) Discuss the challenges and solutions of heterogeneous integration of IOT.

(OR)

- b) Discuss IOT6 smart office Use-case.
- 14. a) Explain the design of iCORE project.

(OR)

- b) Explain the smart Santander project phases and a fire perspective.
- 15. a) Elaborate the parking control main components in smart parking.

(OR)

b) Explain about IP characteristic for integration with the internet.

	SECTION-C			
ANSWER ANY TWO QUESTIONS:  16. (a) Explain about Network technologies used for IOT.  (b) Explain concepts and motivation of the framework IOT			$(2 \times 20 = 40)$ $(10)$ $(10)$	
18. (a) Elaborate CALIPSO architecture with a neat diagram (b) Discuss the applications and research challenges for the foll (i) Smart cities. (5)			(10) lowing:	
	(ii) Smart health	(5)		
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