CBCS SCHEME

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16/17MCA552

# Fifth Semester MCA Degree Examination, Aug./Sept.2020
## Internet of Things

Time: 3 hrs. Max. Marks: 80

**Note:** ***Answer any FIVE full questions, choosing ONE full question from each module.***

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

### Module-1

1 a. Describe the system components of an M2M solution. **(08 Marks)**

b. Outline the challenges the technology evolution required to face in the transition from M2M towards IoT. **(08 Marks)**

**OR**

2 a. Explain the IoT capabilities and implications. **(08 Marks)**

b. Classify the differing characteristics of M2M and IoT by considering the business, Technology, Application and service aspects. **(08 Marks)**

### Module-2

3 a. Explain M2M value chain in detail. **(06 Marks)**

b. Explain IoT value chain in detail. **(10 Marks)**

**OR**

4 a. Explain the fundamental roles within information-driven global value chain. **(10 Marks)**

b. Explain the key application areas of M2M to IoT. **(06 Marks)**

### Module-3

5 a. Write the main design principles and needed capabilities of IoT. **(06 Marks)**

b. Explain the functional layers and capabilities of an IoT solution. **(10 Marks)**

**OR**

6 a. Describe the deployment scenarios for devices in IoT. **(06 Marks)**

b. Explain the gateways and additional tasks in detail. **(10 Marks)**

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### Module-4

7 a. Explain the IoT referential model in detail. **(10 Marks)**

b. Explain M2M high – level architecture. **(06 Marks)**

**OR**

8 a. Explain the IoT referential architecture in detail. **(10 Marks)**

b. Explain M2M service capabilities. **(06 Marks)**

### Module-5

9 a. Explain the technical design constraints when developing and implementing M2M and IoT solutions in the real world. **(08 Marks)**

b. Explain the commercial building automation evolution cycle. **(08 Marks)**

**OR**

10 a. Explain SOCRADES integration architecture. **(10 Marks)**

b. Explain the commercial building automation today. **(08 Marks)**

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