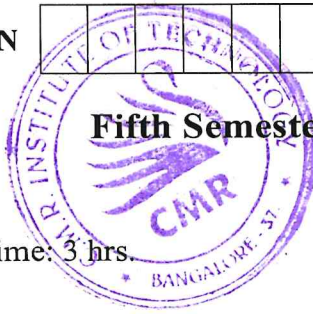


# CBCS SCHEME

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18MCA542



## Fifth Semester MCA Degree Examination, July/August 2021 Internet of Things

Time: 3 hrs.

Max. Marks: 100

**Note: Answer any FIVE full questions.**

- 1 a. Explain IoT solution with a neat diagram. (05 Marks)  
b. Discuss the emerging applications of IoT in various domains. (08 Marks)  
c. Describe the system components of an M2M solution, with a neat diagram. (07 Marks)
- 2 a. Compare the main characteristics of M2M and IoT. (10 Marks)  
b. Explain Megatrends, Capabilities and Implications of IoT. (10 Marks)
- 3 a. Explain the five fundamental roles of I-GVC (Information-Driven Global Value Chain). (10 Marks)  
b. Illustrate the design principles and needed capabilities of IoT. (10 Marks)
- 4 a. Explain an IoT architecture outline. (10 Marks)  
b. With a neat diagram, explain Information-Driven Value Chain for IoT. (10 Marks)
- 5 a. Illustrate the properties of device and its deployment scenarios. (10 Marks)  
b. Explain Knowledge Reference Architecture for M2M and IoT. (10 Marks)
- 6 a. Discuss the different stages of managing M2M data with neat diagram. (10 Marks)  
b. Explain the different phases of CRISP-DM [Cross Industry Standard Process for Data Mining] process model with a neat diagram. (10 Marks)
- 7 a. Explain any five ETSI M2M service capabilities. (10 Marks)  
b. With a neat diagram, explain IoT reference model. (10 Marks)
- 8 a. Briefly explain IoT domain model. (10 Marks)  
b. Explain Open Geospacial consortium architecture with a diagram. (10 Marks)
- 9 a. Explain Service-Oriented Architecture-based device integration with a neat diagram. (10 Marks)  
b. Explain the components of building automation system and its example use cases. (10 Marks)
- 10 a. Describe SOCRADES Integration Architecture. (10 Marks)  
b. Illustrate IMC-AESOP cloud-based architecture vision. (10 Marks)

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