CBCS SCHEME

USN | | | | | | | | | | |

18MCA542

Fifth Semester MCA Degree Examination, July/August 2022
Internet of Things

Time: 3 hrs. Max. Marks: 100

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. Explain in detail, M_2M communication. **(06 Marks)**
b. Explain megatrends, capabilities and IOT implications. **(06 Marks)**
c. Explain M_2M approach with an example. **(08 Marks)**

OR

2 a. Compare the characteristics of M_2M and IOT. **(10 Marks)**
b. Explain IOT approach with an example. **(10 Marks)**

Module-2

3 a. Describe the information driven value chain for IOT. **(10 Marks)**
b. Explain IOT-architecture. **(10 Marks)**

OR

4 a. Discuss the emerging applications of IOT. **(10 Marks)**
b. Explain functional layer and capabilities of an IOT solution. **(10 Marks)**

Module-3

5 a. Explain various service and deployment of a cloud. **(10 Marks)**
b. Describe how data is managed in M_2M. **(06 Marks)**
c. Mention the Four V's of Big Data. **(04 Marks)**

OR

6 a. With a neat diagram, explain how IOT has been integrated with enterprise systems. **(12 Marks)**
b. Explain knowledge management reference architecture. **(08 Marks)**

Module-4

7 a. Briefly explain ETSI M_2M high level architecture. **(12 Marks)**
b. Explain functionality of OGS SWE. **(08 Marks)**

OR

8 a. With pictorial representation of class diagram for the following terms:
(i) Association (ii) Aggregation. (iii) Generalization. **(10 Marks)**
b. With the help of a diagram, how mapping between IOT domain model and deployment view is done. **(10 Marks)**

Module-5

9 a. Explain SOA-based device integration. **(10 Marks)**
b. Explain various levels of SOCRADES integration architecture. **(10 Marks)**

OR

10 a. Explain the evolution of commercial building automation. **(10 Marks)**
b. Explain IMC-AESOP cloud based architecture vision for IOT. **(10 Marks)**

* * * * *

CMRIT LIBRARY
BANGALORE - 560 037