Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **18CS3053** | **Duration :** | **3hrs** |
| **Sub. Name :** | **INTERNET OF THINGS SECURITY** | **Max. Marks :** | **100** |

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| **Q. No.** | **Sub Div.** | **Questions** | **Course Outcome** | **Marks** |
| **ANSWER ANY FIVE QUESTIONS (5 x 16 = 80 Marks)** | | | | |
| 1. | a. | Summarize the architectural design of Internet of things to be integrated into all walks of life with emphasis on design principles and needed capabilities. | CO1 | 8 |
| b. | Analyze data management and business processes in IoT with considerations for M2M data. | CO5 | 8 |
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| 2. |  | Analyze the security concerns of IoT applications with relation to a real time event and design the security architecture in the Internet of things. | CO4 | 16 |
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| 3. | a. | Identify the threats to access control, privacy and availability specific to internet of things with real life examples. | CO3 | 10 |
| b. | Explain in detail the attack and fault trees in relation to internet of things. | CO3 | 6 |
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| 4. |  | Examine the cryptographic controls built into IoT communication protocol for ZigBee and the cryptographic controls related to IoT messaging protocols. | CO2 | 16 |
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| 5. | a. | Discuss the trust and trust models for internet of things with solutions for preventing unauthorized access. | CO3 | 10 |
| b. | Illustrate the identity and access management architecture for internet of things. | CO1 | 6 |
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| 6. |  | Build the machine-to-machine and internet of things analytics to perform knowledge management to ensure everything as a service (XaaS) architecture. | CO5 | 16 |
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| 7. |  | Analyze and categorize the encryption and decryption techniques and the digital signing in relation to internet of things application in medical field. | CO4 | 16 |
| **COMPULSORY QUESTION (1 x 20 = 20 Marks)** | | | | |
| 8. | a. | Explain the enterprise internet of things cloud security architecture. | CO2 | 10 |
| b. | Elaborate the cloud services that can be shifted to internet of things. | CO5 | 10 |