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



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

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| **Code :** | **18CS3084** | **Duration :** | **3hrs** |
| **Sub. Name :** | **SMART SENSORS AND INTERNET OF THINGS** | **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. | Discuss the variety of operational benefits as well as interrelated risks attached to IoT adoption that occur at all levels. | CO1 | 10 |
| b. | Classify the environmental parameters used in measuring and monitoring IoT. | CO2 | 6 |
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| 2. |  | Identify and relate the sensors for data collected from health monitoring system. | CO3 | 16 |
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| 3. |  | Explain the important characteristics of sensors in determining the characteristics fractional order element. | CO1 | 16 |
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| 4. |  | Explain in detail the important components and their features fabrication of sensor and smart sensor. | CO3 | 16 |
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| 5. |  | Elucidate the usefulness of Silicon Technology in smart sensor and future scope of research in smart sensor. | CO3 | 16 |
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| 6. |  | Describe the constant phase impedance for sensing applications such as humidity, water quality and milk quality impedance spectroscopy. | CO4 | 16 |
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| 7. |  | Recognize the Interface Electronic Circuit for smart sensors and challenges for Interfacing the smart sensor. | CO3 | 16 |
|  | | **COMPULSORY QUESTION (1 x 20 = 20 Marks)** |  |  |
| 8. |  | Illustrate the recent trends in smart sensor for day to day life and how does it benefit the society? | CO4 | 20 |