

III B. Tech II Semester Supplementary Examinations, November - 2019**INTERNET OF THINGS**

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
 2. Answer **ALL** the question in **Part-A**
 3. Answer any **FOUR** Questions from **Part-B**
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PART -A**(14 Marks)**

1.
 - a) Differentiate between sensors and actuators. [2M]
 - b) Compare and contrast microprocessor and microcontroller. [2M]
 - c) What is XBEE radio? [2M]
 - d) What kind of IP is used in addressing IoT devices, Give an example? [3M]
 - e) What is MQTT? [3M]
 - f) What is Nimbits? [2M]

PART -B**(56 Marks)**

2.
 - a) What is IoT? Describe in detail about IoT ecosystem. [7M]
 - b) How does the functioning of UART, SPI and I2C differ? [7M]
3.
 - a) Explain M2M service layer standardization. [7M]
 - b) Describe the design principles for connected devices. [7M]
4.
 - a) Write about the basic operations available in CoAP protocol. [7M]
 - b) Describe any two web communication protocols. [7M]
5.
 - a) Give a short note on internet connectivity principles. [7M]
 - b) Describe in detail about FTP service. [7M]
6.
 - a) Describe the secure authentication and access control in constrained devices. [7M]
 - b) Explain the data acquiring and storage mechanism for IoT. [7M]
7. How to use a service platform while developing IoT applications? Explain with respective to Xively cloud service. [14M]

