**R17**

Code No: 844AX

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**
**MCA IV Semester Examinations, April/May - 2019**
**INTERNET OF THINGS**

Time: 3hrs                                                                                      Max.Marks:75

**Note:** This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

## PART - A

$5 \times 5$ Marks = 25

1.a) Explain the salient points of Cloud Computing. [5]
b) Explain the concepts of IoT system management. [5]
c) Explain the language features of Python. [5]
d) Explain reading process of input from pins in Raspberry Pi. [5]
e) Explain web server for IoT. [5]

## PART - B

$5 \times 10$ Marks = 50

2. Explain Big Data Analytics and communication protocols in reference to IoT. [10]
**OR**
3. Explain wireless sensor networks and embedded systems. [10]

4. Give a good presentation of Software Designed Networks and network function virtualization. [10]
**OR**
5. Give a good presentation of NETCOZF and YANG-NETCONF. [10]

6. Explain control flow and functions in Python with examples. [10]
**OR**
7. Explain classes and exception handling in Python with examples. [10]

8. Explain Python programming with Raspberry Pi with focus on controlling output. [10]
**OR**
9. Give a good account of IoT Physical devices. [10]

10. Explain cloud storage models and Communication APIs. [10]
**OR**
11. Explain Python web application frame work. [10]

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