



Code No: 824AX

**R15****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA IV Semester Examinations, June/July - 2018****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 × 5 Marks = 25**

- 1.a) State Applications of IoT. [5]
- b) Explain about Network function virtualization. [5]
- c) Elaborate on XML. [5]
- d) Mention data types in python. [5]
- e) Name some industries which have identified the most from IOT. [5]

**PART - B****5 × 10 Marks = 50**

- 2.a) Define WSN. Explain about various concepts involved in WSN.
- b) Discuss on Embedded systems and its applications. [5+5]

**OR**

3. Define IoT. Explain about things/objects in IoT with examples. [10]

- 4.a) Differentiate between SDN and NFV.

- b) Explain about SNMP NETOPEER. [5+5]

**OR**

5. Discuss on IoT system management with NETCOZF and YANG-NETCONF. [10]

6. Explain python packages with sample programs. [10]

**OR**

7. Define a function in python

- a) Swapping of two numbers using a temporary variable

- b) Factorial of a given number n. [5+5]

8. Elaborate on Raspberry pi-interfaces-SERIAL, SPI, I2C. [10]

**OR**

9. Mention IoT physical devices. How programming is carried on Raspberry pi-interfacing external gadgets. [10]

10. Explain

- a) Web server of IoT

- b) Cloud for IoT. [5+5]

**OR**

11. Discuss on Cloud storage models and communication API's. [10]