Code No: 5458AG

R17

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I Semester Examinations, June/July - 2018
INTERNET OF THINGS
(Computer Science and Engineering)

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) What are the main components of IoT? What issues might affect the development and
implementation of the IoT? [5]

b) What is the difference between IoT and IoE? Explain. [5]

c) Write a statement that initializes the value of a variable X to be a list of 10 characters in
which all the elements have an initial value of a, without mentioning the character d.
[5]

d) How can you connect Raspberry Pi to Local Network via WiFi using DHCP (write the
steps)? [5]

e) How is Fog Computing platform different and better than other IoT platforms? Explain.
[5]

PART - B

5 × 10 Marks = 50

2. What happens to data protection and privacy in case of an IoT network? Will it impact
sustainability? Explain with suitable example in detail. [10]

OR

3. What difference can organizations make to ensuring IoT will be secure? Are there any
serious potential threats to IoT and its related technologies? Explain in detail. [10]

4. Explain different types of physical layer technologies used in IoT applications. [10]

OR

5. What are the major characteristics of Linux over other Operating Systems which make it
suitable for IoT systems? Explain with suitable example in detail. [10]

6. Using Python package URLLib, Write a program that prompts the user for the
department code and prints the name and code of every employee in that department.
[10]

OR

7. Write a full definition for a function called maxNum which takes as an argument a lists of
numbers, calculates the list of highest numbers in each of the list. [10]

8. Write the step to identify HTTP name via in confing. Ping the address and capture the output by taking a screenshot. [10]

OR

9. Write the commands and steps to lsunchPiP (package manager for python) and Requests (Apache2 HTTP Library). [10]

10. How is the big data storage monitoring and controlling connected devices? How will it handle IoT security? Explain with suitable example in detail. [10]

OR

11. What are the methods used by HTTP supported by REST? What purpose does the OPTIONS method serve for the RESTful Web Services? Explain with suitable example in detail. [10]

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