

R18

Code No: 157CD

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, January/February - 2023

INTERNET OF THINGS

(Computer Science and Engineering)

Time: 3 Hours

Max.Marks:75

Note: i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A

(25 Marks)

- 1.a) What is the scope of IoT? [2]
- b) Give the example of Big Data generated by IoT. [3]
- c) Write the limitations of Conventional networks. [2]
- d) What is SDN and List out its advantages? [3]
- e) Give an example type conversion in Python. [2]
- f) What is pass control structure in Python? [3]
- g) List out Linux flavors on which Raspberry Pi works? [2]
- h) Give LED status in Raspberry and write each status function. [3]
- i) What is WAMP protocol? [2]
- j) Write Amazon services for IoT. [3]

PART – B

(50 Marks)

- 2.a) Describe General block diagram of IoT.
- b) Explain application layer protocols in IoT. [5+5]

OR

- 3.a) Explain IoT level-2 and compare with IoT level-6.
- b) Elaborate how IoT is useful in smart irrigation. [5+5]

- 4.a) Distinguish between M2M and IoT.
- b) Explain NFV architecture in detail. [5+5]

OR

- 5.a) “IoT Management is required”, Justify it?
- b) Explain the architecture of Software Defined Network. [5+5]

- 6.a) Describe the features of Python language.
- b) What is JSON? Explain encoding and decoding a message in Python using JSON. [5+5]

OR

- 7.a) What is List in Python and explain its operations.
- b) Explain function creation and definition in Python and illustrate with an example. [5+5]

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- 8.a) Explain components of Raspberry Pi Board.
- b) Give code for LED on/off on Raspberry Pi using switch.

[5+5]

QA QA QA QA QA QA QA QA QA

- 9.a) Describe Raspberry Pi interfaces in detail.
- b) List out and explain functions used in Raspberry Pi.

[5+5]

- 10.a) Explain key elements of WAMP protocol.
- b) Describe the interactions in WAMP protocol.

[5+5]

OR

QA QA QA QA QA QA QA QA QA

- 11.a) Analyze Django template in detail.
- b) Write the services of Amazon EC2.

[5+5]

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