

Code No: 156DR**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year II Semester Examinations, August/September - 2021****FUNDAMENTALS OF INTERNET OF THINGS****(Common to EEE, CSE, IT)****Time: 3 Hours****Max. Marks: 75****Answer any five questions
All questions carry equal marks**

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- 1.a) Identify the link layer protocols in IoT. [7+8]
b) Explain the functional blocks of IoT.
- 2.a) Demonstrate request-response communication model. [8+7]
b) Discuss IoT network technologies.
- 3.a) Explain M2M system architecture. [7+8]
b) Write the applications of M2M.
- 4.a) How to integrate sensors and actuators with Arduino? [7+8]
b) Give the anatomy of Arduino program.
- 5.a) Explain the control structure in Python. [7+8]
b) Write Python program to control LED on Raspberry Pi.
- 6.a) List and explain popular commands used in Raspberry Pi. [7+8]
b) Steps to interface Raspberry Pi with a sensor.
- 7.a) Explain key elements of SDN. [7+8]
b) Describe the steps for data acquiring in IoT implementation.
- 8.a) Explain the different services of Cloud computing. [7+8]
b) Give the requirements and devices for interconnected transport system.

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