R20

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA III Semester Examinations, September/October - 2022
INTERNET OF THINGS

Time: 3 Hours   **Max.Marks:75**

Answer any five questions
All questions carry equal marks
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1.a)   Define Internet of Things (IoT) and write its characteristics.
  b)   What are the various levels of IoT? Discuss.   [8+7]

2.a)   Explain about IoT communication model and communication protocols.
  b)   Discuss about any three domain specific IoTs.   [8+7]

3.a)   What are called Software Defined Networks (SDN)? Explain.
  b)   Explain the IoT system management with YANG- NETCONF.   [7+8]

4.a)   Discuss about Network Function Virtualization (NFV).
  b)   Explain the IoT system management with SNMP and NETOPEER.   [7+8]

5.a)   Explain data types used in Python with suitable examples.
  b)   What are the different loop control statements available in python? Explain with suitable examples.   [7+8]

6.a)   With suitable illustrations, discuss about Date and Time operations carried out in Python.
  b)   What is JSON file? Explain with an example program about the usage of JSON module in python.   [7+8]

7.a)   Explain the concepts involved in Raspberry Pi and analyze its features.
  b)   Write a Python program with Raspberry PI to interface external gadgets. [7+8]

8.a)   Describe about different Cloud Service Models in detail.
  b)   Explain about Python web application framework.   [8+7]

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