P-7749

[6180]-279

T.E. (Artificial Intelligence and Machine Learning)
IOT WITH ARTIFICIAL INTELLIGENCE
(2019 Pattern) (Semester - I) (318542)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) Answer Q.1 or Q.2, Q.3 or Q.4, Q5 or Q6, Q7or Q8.

2) Neat diagrams must be drawn wherever necessary.

3) Figures to the right side indicate full marks.

4) Assume suitable data if necessary.

Q1) a)   What is IPV6 protocol? Explain advantages of IPV6 over IPV4 protocol
                                                                               [8]

   b)   Write short note on Constrained nodes.   **[6]**

   c)   Write applications of IEEE 802.15.4?   **[4]**

                                    OR

Q2) a)   Explain detail architecture of MQTT protocol.   **[8]**

   b)   State and describe various characteristics of LoRaWAN technology?
                                                                               [6]

   c)   Explain IEEE 802.11ah protocol.   **[4]**

Q3) a)   Explain requirements of unstructured data storage.   **[7]**

   b)   Explain Data Integration platforms.   **[6]**

   c)   Explain Cisco frameworks.   **[4]**

                                    OR

Q4) a)   List and Explain any three IOT frameworks.   **[7]**

   b)   Write short note on Data Warehouse.   **[6]**

   c)   State and describe unstructured data storage challenges.   **[4]**

Q5) a) Explain different types of data analytics. [8]

b) Explain encrypting in Data in Motion. [6]

c) Explain key features of Clouds to support IOT. [4]

OR

Q6) a) Explain Everything as a Service cloud service model (XAAS). [8]

b) Short note on Data At Rest. [6]

c) List advantages and disadvantages of structured data. [4]

Q7) a) Explain in detail big Data & IOT Data analytics [7]

b) Write Short note in Asset management using IOT. [6]

c) Explain in brief IOT cloud platforms. [4]

OR

Q8) a) Describe advantages and disadvantages of IOT automation. [7]

b) Discuss the benefits of IoT enabled smart grid technology. [6]

c) What are real world design constraints in IOT? [4]

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