

Total No. of Questions : 8]

SEAT No. :

PE2407

[Total No. of Pages : 2

[6584]-349

B.E. (Robotics & Automation Engineering)

INTERNET OF THINGS AND MACHINE LEARNING

(2019 Pattern) (Semester - VII) (Elective - IV) (411504B)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory i.e. Solve Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.*
- 2) *Assume suitable data, if necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Neat diagrams must be drawn wherever necessary.*

- Q1)** a) Explain role of API in IOT Data Storage & Retrieval. [9]
b) Explain the concept of Databases connectivity with IOT along with its uses. [9]

OR

- Q2)** a) Explain the terms : data integration, Data storage, data retrieval, data transformation in detail with respect to API. [9]
b) What is Ipython Module? Why we need it in IOT? Explain various steps involved in it in detail. [9]

OR

- Q3)** a) Explain various Association Rules while Learning ML. [9]
b) Enlist in detail different clustering techniques used in ML. [9]

- Q4)** a) Explain difference between Artificial Intelligence and Machine Learning in detail. [9]
b) Explain steps involved while gathering and pre-processing of data in ML. [9]

- Q5)** a) Explain how we post sensors data to web server in detail. [8]
b) What is ESP8266? Explain working flow of ESP8266 Wi-Fi Module in detail. [9]

OR

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- Q6)** a) Explain various Wi-Fi library components that we used in ESP8266 WiFi module. [8]
- b) Explain processing of Arduino IDE while Networking with ESP8266 WiFi module in detail. [9]

- Q7)** a) Explain concept of smart metering with respect to IOT in detail. [8]
- b) Explain the working of e-Health Body Area Networks with respect to patient movement trackers in detail. [9]

OR

- Q8)** a) Explain role of Iot/IIoT in smart City in detail. [8]
- b) Explain role of IOT in Agriculture - crop health monitoring and automating the irrigation system. [9]

