

Total No. of Questions : 8]

SEAT No. :

P-8658

[Total No. of Pages : 2

[6181]-390

**B.E. (Robotics & Automation)**

**INTERNET OF THINGS AND MACHINE LEARNING  
(2019 Pattern) (Semester - VII) (411504 (B)) (Elective - IV)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates :*

- 1) Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data if necessary.

**Q1)** a) What is cloud storage? [6]

b) Which are the Characteristics of IoT Databases? [6]

c) Which are Wireless Media Access Issues in Internet of Things? [5]

OR

**Q2)** a) How does cloud storage work? [6]

b) State IoT Database Example Use Cases. [6]

c) Describe Wireless Sensors for the Internet of Things (IoT). [5]

**Q3)** a) What is the role of machine learning in automation? [6]

b) Which are the types of Machine Learning? Explain any one? [6]

c) Explain data collection and pre-processing techniques. [5]

OR

**Q4)** a) What is Motivation and role of machine learning in Robotics and Automation? [6]

b) Explain the Machine learning Life cycle? [6]

c) What are the Uses of Clustering in ML? [5]

*P.T.O.*

- Q5)** a) What is the ESP8266 Wi-Fi Module? [6]  
b) Describe ESP8266 WiFi Library for Arduino. [6]  
c) How to send sensor data to web server? [6]

OR

- Q6)** a) Draw the circuit diagram how to use ESP8266 Wi-Fi Module. [6]  
b) How do web servers work? [6]  
c) Which are the steps to install and configure Apache Http Webserver and PHP module in windows server machine. [6]

- Q7)** a) Why IoT is important in real life? [6]  
b) Which are the applications of IoT today? Explain in brief. [6]  
c) How to create the best patient tracking system for your hospital? [6]

OR

- Q8)** a) State and explain IoT Applications in Manufacturing. [6]  
b) How IoT is used in smart cars? [6]  
c) What is smart crop monitoring system using IoT? [6]

