[6188]-293

B.E. (Artificial Intelligence and Data Science) (Insem.)
INDUSTRIAL INTERNET OF THINGS (Elective - III)
(2019 Pattern) (Semester - VII) (417523(B))

Time : 1 Hour]   *[Max. Marks : 30*

Instructions to the candidates:
1) *Solve questions Q.1 or Q.2, Q.3 or Q.4.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right indicate full marks.*
4) *Assume suitable data if necessary.*

Q1) a) Compare and contrast in between IOT and IIOT. **[5]**

b) Discuss various opportunities and challenges in implementation of IIOT. **[5]**

c) State and explain the role of IIOT in manufacturing processes with suitable and neat sketch. **[5]**

OR

Q2) a) Elaborate various requirements and design considerations of IIOT.**[5]**

b) Comment on industrial revolutions and significance of IIOT with suitable example. **[5]**

c) List any 5 advantages and applications of IIOT. **[5]**

Q3) a) Explain IIOT Sensor Network with neat and suitable diagram. **[5]**

b) State and explain in brief the role of sensors and actuators used in industrial processes. **[5]**

c) Compare nWave and Ingenue RPMA on the basis of the following parameters : **[5]**

     i) Frequency Band   ii) Range

     iii) Topology   iv) Uplink Data Rate

     v) Downlink Data Rate

Q4) a) Differentiate between Sensors and Actuators. [Any 5 valid points] **[5]**

b) Explain data acquisition and process automation in IIOT with suitable sketch. **[5]**

c) List any 5 features of Wi-Fi Backscatter. **[5]**

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