

Total No. of Questions : 4]

SEAT No. :

P-5324

[Total No. of Pages : 2

[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 Ingenuie RPMA on the basis of the following parameters : [5]
i) Frequency Band ii) Range
iii) Topology iv) Uplink Data Rate
v) Downlink Data Rate

P.T.O.

OR

- 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]

