

Total No. of Questions : 4]

SEAT No. :

P5061

[Total No. of Pages : 1

[6187]-464

**T.E. (Information Technology)(Insem)
INTERNET OF THINGS**

(2019 Pattern) (Semester-I) (Elective-I) (314445 D)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Solve 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) Define IOT and explain physical design of IOT. [7]

b) Explain IOT World Forum (IoTWF) standardized seven-layer IoT architectural reference model. [8]

OR

Q2) a) Explain enabling technologies in IOT. [7]

b) Write a short note on :
Software defined Networking
Network function virtualization [8]

Q3) a) Define sensor and explain types of sensors with examples. [7]

b) Draw and explain interfacing of DC motor with ARDIUNO with program of speed control. [8]

OR

Q4) a) Draw and explain interfacing of LED with ARDIUNO with program to blink it. [7]

b) Write a short note on :
i) I2C bus protocol
ii) CAN bus protocol [8]

