

Total No. of Questions : 4]

SEAT No. :

P9032

[Total No. of Pages : 1

Oct-22/TE/Insem - 564
T.E. (Information Technology)
INTERNET OF THINGS
(2019 Pattern) (Semester - I) (Elective - I) (314445 D)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side 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 (Any Two): [8]
i) Software defined Networking
ii) Network function virtualization
iii) Wireless Sensor Networks

- Q3)** a) Define Sensor and explain types of sensors with examples. [7]
b) Write a short note on (Any Two): [8]
i) 12C bus protocol
ii) CAN bus protocol
iii) UART
iv) USRT

OR

- Q4)** a) Draw and explain interfacing of LED with ARDIUNO with program to blink it. [7]
b) Draw and explain interfacing of DC motor with ARDIUNO with program of speed control. [8]

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