

Total No. of Questions : 4]

SEAT No. :

**PD29**

[Total No. of Pages : 1

[6409]-228

**S.E. (Artificial Intelligence & Data Science) (Insem)**

**INTERNET OF THINGS**

**(2019 Pattern) (Semester - IV) (217529)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Solve Q.1 or Q.2, Q.3 or Q.4.*
- 2) *Draw neat and clean diagrams.*
- 3) *Assume suitable data, if necessary.*

- Q1)** a) Define interrupt? Explain different types of Interrupt in 8086? [5]  
b) Explain difference between Micro, MINI, mainframe and supercomputer? [5]  
c) Convert following Hex no. to its respective Binary & Decimal no. [5]  
i) FAB4  
ii) DCA2

OR

- Q2)** a) What is PCI? Explain with its function. [5]  
b) Explain different phases of Instruction Cycle? [5]  
c) What is Bus? Explain in brief the types of Bus. [5]
- Q3)** a) Write a note of DRAM interfacing. [5]  
b) Differentiate between Isolated I/O and Memory Mapped I/O. [5]  
c) Draw and explain block diagram of ADC. [5]

OR

- Q4)** a) Explain Block diagram of 8086. Explain with features. [5]  
b) Draw and explain internal block diagram of 8255. [5]  
c) Describe in brief: [5]  
i) SPI  
ii) I2C  
iii) UART  
iv) CAN  
v) USB

