

Total No. of Questions : 4]

SEAT No. :

**PA-10006**

[Total No. of Pages : 1

**[6008]-262**

**S.E. (AI & DS) (Insem)**

**INTERNET OF THINGS**

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

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) Attempt Q.1 or Q.2, Q.3 or Q.4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data if necessary and mention it clearly.

- Q1)** a) Draw a block diagram of basic components of a computer system. Explain each component in detail. [10]  
b) With an example, write the steps to subtract a large number from a smaller number using 2's complement method. [5]

OR

- Q2)** a) Explain the instruction cycle in detail. [7]  
b) Difference between microprocessor and microcontroller. [8]

- Q3)** a) Explain about the Stepper Motor System. [5]  
b) Explain in detail the interfacing I/O Ports-PIO-8255. [10]

OR

- Q4)** a) Explain Peripherals and interfacing with 8086. [7]  
b) Explain in details modes of operation-interfacing Analog-Digital Data Converter. [8]

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