Department of Electronics Engineering

CT2, ETU403 Microprocessor and its Interfacing, 6.3.2019

Name of Student:.... [redacted] .....Registration No. [redacted]

Every question carries 5 marks

1. Draw timing diagram of instruction MOV A,M
2. Write subroutine to generate a delay of x ms (x is your roll No.)
3. Write an ALP to compare two numbers
4. Explain with example the execution of instructions PUSH and CALL

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Time : 1Hr | Class Test - II | Marks: 15

Date: 09/03/2016 | ETU403 Microprocessor and it's Interfacing

Solve any five (5)

Qu.1. "It becomes extremely important to preserve the lower order address byte every time". Justify the statement and discuss the method to achieve this. 3

Qu.2. Enlist the various data transfer schemes in $8085\mu P$ and discuss the Interrupt driven data transfer with flowchart. 3

Qu.3. In the given delay subroutine, calculate the amount of delay inserted, if $f_{osci} = 3MHz$; 3

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        LXI  B,01EBh;  10
again:  MVI  D,FFh;    7
  up:   DCR  D;        4
        JNZ  Up;       10/7
        DCX  B;        6
        MOV  A,C;      4
        ORA  B;        7
        JNZ  Again;    10/7
        RET  ;         10
```

Qu.4. Discuss how an instruction cycle progresses along each T-state for 'ADD B' instruction 3

Qu.5. With an available memory chip of 4kB, expand the memory capacity upto 16kB, draw a neat interfacing diagram. 3

Qu.6. For a $8085\mu P$ system WAP to read the status of a switch connected to the SID line and accordingly turn ON/OFF the LED connected to the SOD line. Draw the diagram. 3