

[3 hrs]

Total Marks:80

Question no 1 is compulsory.

Attempt any THREE from the remaining questions.

Q. 1 Attempt ant FOUR questions.

- a) Explain rotate instructions used in PIC18F microcontroller. [5]
- b) Write the differences between interrupt and polling. [5]
- c) Explain the working of Watch Dog timer of PIC18F [5]
- d) Explain the pipelining feature in PIC microcontroller [5]
- e) Explain the status register in pic18 Microcontroller [5]

Q. 2 a) Explain the Table Read operation in PIC18f4520 microcontroller [10]  
b) Explain the structure of TMR0 and T0CON registers in PIC microcontroller [10]

Q. 3 a) What is mean by addressing mode and hence explain different addressing modes used in pic18f458 microcontroller. [10]  
b) Draw the IO port structure in PIC18 microcontroller and explain the registers associated with them. [10]

Q. 4 a) Explain the concept of Global Interrupt Enable (GIE) and Peripheral Interrupt Enable (PEIE) [10]  
b) Explain the different registers of PIC18F associated with serial communication. [10]

Q. 5 a) Explain the CCP (Compare, Capture, PWM) module in PIC18F4520 microcontroller in detail. [10]  
b) Which are the different instruction formats used in PIC18f microcontroller. [10]

Q. 6 Write short notes on:  
a) ADC module and associated registers with ADC [10]  
b) DC Motor interfacing with PIC18f microcontroller. [10]

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