

Total No. of Questions : 4]

SEAT No. :

PA-4980

[6008] - 232

[Total No. of Pages : 2

S.E. (Information Technology) (Insem)

PROCESSOR ARCHITECTURE

(2019 Pattern) (Semester - II) (214451)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4.
- 2) Neat diagrams must be drawn whenever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data if necessary.

Q1) a) Explain program memory organization of PIC18 micro controller with suitable diagram. **[6]**

b) Draw and explain status register of PIC18 microcontroller. **[5]**

c) Explain watchdog timer used in PIC18 microcontroller. **[4]**

OR

Q2) a) With a neat diagram discuss in detail about the architecture of PIC18 micro controller. **[6]**

b) Write short note on Brownout Reset. **[5]**

c) Differentiate between RISC and CISC. **[4]**

Q3) a) Name the SFRs associated with each I/O port of PIC18F. What is the role of PORTx SFR? **[4]**

b) Calculate total delay generated by Timer0 if (FFF1) H is loaded into it.

Assume Crystal frequency = 10 MHz **[4]**

c) Explain working of PIC18F Timer1 with the help of suitable diagram. **[7]**

OR

P.T.O.

Q4) a) Find the value to be loaded in TRISD and TRISC register for the following: [4]

RD0,RD1,RD2,RD3 as input port

RD4,RD5,RD6,RD7, as output port

RC0,RC2,RC4,RC6,RC7 as output port

RC1,RC3,RC5 as input port

b) Explain in detail Prescaling and Postscaleing of PIC18 Timers. [4]

c) Explain Timer0 Control Register T0CON in detail. [7]

