

Total No. of Questions: 4

SEAT NO

[Total No. of Pages: 1]

S.E. INSEM / APR- 2022

S.E. (IT)

214451: Processor Architecture

2019 Pattern - Semester-II

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, and Q.3 or Q.4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

		Marks
Q1	a Draw and explain the architecture of PIC18F458	7
	b Explain any four instructions of PIC18 with example.	8
	OR	
Q2	a What are various oscillator options in PIC18? Explain any two. Write a note on config register.	7
	b What is the role of a microcontroller in an embedded system? Explain different selection criteria of microcontroller for an embedded system.	8
Q3	a In the PIC18F458, how many pins are designated as I/O port pins? Draw the pin diagram of PIC18F458.	7
	b Explain working of Timer 1 as timer and counter in detail.	8
	OR	
Q4	a How many pins are designated as PORTB in the 40-pin DIP package? What are their numbers? Explain PORTB pins with multi functions if available.	7
	b Explain in detail Timer2 SFRs.	8