Reg. No.:					

Question Paper Code: 58461

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021

One credit

Electronics and Communication Engineering

15UEC861 - PIC EMBEDDED PROGRAMMING

		(Re	egulation 2015)				
Du	ration: 1.30 hour		Maxi	mum: 50 Marks			
		Answ	er ALL Questions				
		PART A	$-(20 \times 1 = 20 \text{ Marks})$				
1.	gas is emitting blue color light on led						
	(a) Aluminium G	allium Phosphide (A	dGaP) (b) Aluminium Gallium Nitride (AlGaN)				
	(c) Zinc Selenide	(ZnSe)	(d) Gallium Arsenide (GaAs)				
2.	In PIC 16F877A PORT has only 6 pins						
	(a) A	(b) B	(c) C	(d) D			
3.	Which software was used to upload the program on PIC ic for simulation						
	(a) Pic kit 2	(b) MP lab	(c) Proteus	(d) HTML5			
4.	EEPROM data memory size						
	(a) Inline	(b) Summary	(c) In place and summary	(d) All the above			
5.	7segment has	pins.					
	(a) 8	(b) 10	(c) 12	(d) 16			
6.	ADC stands for _						
	(a) Analog & digit	tal control	(b) Amplitude-to-digital converter				

(d) None of the above

(c) Analog-to-digital converter

7.	RISC							
	(a) rearrange instruction set computer							
	(b) reduced instruction set computer							
	(c) reduced instruction series controller							
	(d) None of these							
8.	LED stands for							
	(a) light emitting	g diode	(b) light em	(b) light emitted display				
	(c) liquid emitted display		(d) none of	(d) none of these				
9.	Which hex-value is used to glow 6 on common anode 7segment							
	(a) 7D	(b) 82	(c) F9	(d) 3F				
10.	Which bit permits to enable (if set) or disable (if cleared) all the interrupts in an INTCON register?							
	(a) GIE	(b) ADIE	(c) RBIE	(d) TOIE				
11.	TRIS used to							
	(a) Setting the type of the port pins (Input or Output)(b) Settings used for transmitting the data							
	(c) Settings used for receiving the data							
	(d) None of these							
12.	PIC16F877A operating voltage rangeV.							
	(a) $2.0 - 5.5$	(b) $2.0 - 6.5$	(c) $1.0 - 6.5$	(d) $4.0 - 5.5$				
13.	TXSTA used to							
	(a) Setting the type of the port pins (Input or Output)(b) Settings used for transmitting the data							
	(c) Settings used for receiving the data							
	(d) None of these							

14.	RCSTA used to							
	(a) Setting the type of the port pins (Input or Output)							
	(b) Settings used for transmitting the data							
	(c) Settings used for	(c) Settings used for receiving the data						
	(d) None of these							
15.	are ty	pes of 7 segment.						
	(a) Common anode & common emitter							
	(b) Common cathode & common emitter							
	(c) Common anode & common cathode							
	(d) None of the the	se						
16.	Types of switches							
	(a) SPST	(b) SPDT	(c) DPST	(d) all of t	hese			
17.	Identify the correct statement:							
	(a) Only 35 single-word instructions to learn							
	(b) Setting a TRISA bit (= 1) will make the corresponding PORTA pin an input							
	(c) PIC16F877A operating voltage range $1.0 - 6.5 \text{ v}$							
	(d) Relay is a passive component							
18.	Data Memory (RA	M) size	_					
	(a) 368 x 8 bytes	(b) 256 x 8 by	rtes (c) 8K	x 14 words	(d) all of these			
19.	USART stands for							
	(a) Unit Synchrono	ous Asynchronous R	eceiver Trans	mitter				
	(b) Universal Serial Asynchronous Receiver Transmitter							
	(c) Universal Synchronous Asynchronous Receiver Transmitter							
	(d) None of the the	ese						
20.	In LCD program command was use to clear display screen?							
	(a) 0x02	(b) 0x01	(c) 0x	1C	(d) 0x1C			

PART - B $(2 \times 15 = 30 \text{ Marks})$

21. (a) Draw and explain pin diagram for 16x2 LCD. (15)

Or

- (b) Draw and explain pin diagram for PIC16F877A. (15)
- 22. (a) Write a simple program for LED blinking. (15)

Or

(b) Write a hex-value & binary-value for glow 0-9 on common anode 7 segment. (15)