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Question Paper Code: 58461

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2024

One credit

Electronics and Communication Engineering

15UEC861 - PIC EMBEDDED PROGRAMMING

(Regulation 2015)

Duration: 1.30 hour

Maximum: 50 Marks

Answer ALL Questions

PART A - (20 x 1 = 20 Marks)

- ____ gas is emitting blue color light on led
(a) Aluminium Gallium Phosphide (AlGaP) (b) Aluminium Gallium Nitride (AlGaN)
(c) Zinc Selenide (ZnSe) (d) Gallium Arsenide (GaAs)
- In PIC 16F877A PORT ____ has only 6 pins
(a) A (b) B (c) C (d) D
- Which software was used to upload the program on PIC ic for simulation
(a) Pic kit 2 (b) MP lab (c) Proteus (d) HTML5
- EEPROM data memory size _____
(a) Inline (b) Summary (c) In place and summary (d) All the above
- 7segment has _____ pins.
(a) 8 (b) 10 (c) 12 (d) 16
- ADC stands for _____
(a) Analog & digital control (b) Amplitude-to-digital converter
(c) Analog-to-digital converter (d) None of the above

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 diode
 - (b) light emitted display
 - (c) liquid emitted display
 - (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 range _____V.
- (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 receiving the data
 - (d) None of these
15. _____ are types of 7 segment.
- (a) Common anode & common emitter
 - (b) Common cathode & common emitter
 - (c) Common anode & common cathode
 - (d) None of the these
16. Types of switches
- (a) SPST
 - (b) SPDT
 - (c) DPST
 - (d) all of these
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 v
 - (d) Relay is a passive component
18. Data Memory (RAM) size _____
- (a) 368 x 8 bytes
 - (b) 256 x 8 bytes
 - (c) 8K x 14 words
 - (d) all of these
19. USART stands for _____
- (a) Unit Synchronous Asynchronous Receiver Transmitter
 - (b) Universal Serial Asynchronous Receiver Transmitter
 - (c) Universal Synchronous Asynchronous Receiver Transmitter
 - (d) None of the these
20. In LCD program _____ command was use to clear display screen?
- (a) 0x02
 - (b) 0x01
 - (c) 0x1C
 - (d) 0x1C

PART - B (2 x 15 = 30 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)
