Program: BE Electronics and Telecommunication Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: ECC601 Course Name: Microcontrollers & Applications

Time: 1 hour Max. Marks: 50

Note to the students :- All Questions are compulsory and carry equal marks .

Option A: IE1 Option B: TF0 Option C: IE0 Option D: TF1 Q2. What is the function of watchdog timer? Option A: The watchdog Timer is an external timer that resets the system if the software fails to operate properly. Option B: The watchdog Timer is an internal timer that sets the system if the software fails to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly.	Q1.	In 8051 which interrupt has highest priority?
Option B: TF0 Option C: IE0 Option D: TF1 Q2. What is the function of watchdog timer? The watchdog Timer is an external timer that resets the system if the software fails to operate properly. Option B: The watchdog Timer is an internal timer that sets the system if the software fails to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	-	
Option C: IEO Option D: TF1 Q2. What is the function of watchdog timer? Option A: The watchdog Timer is an external timer that resets the system if the software fails to operate properly. Option B: The watchdog Timer is an internal timer that sets the system if the software fails to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	·	
Option D: TF1 Q2. What is the function of watchdog timer? Option A: The watchdog Timer is an external timer that resets the system if the software fails to operate properly. Option B: The watchdog Timer is an internal timer that sets the system if the software fails to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	·	7
Q2. What is the function of watchdog timer? Option A: The watchdog Timer is an external timer that resets the system if the software fails to operate properly. Option B: The watchdog Timer is an internal timer that sets the system if the software fails to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV A,#0 MOV A,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	·	
Option A: The watchdog Timer is an external timer that resets the system if the software fails to operate properly. Option B: The watchdog Timer is an internal timer that sets the system if the software fails to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	Option D:	IFI
Option A: The watchdog Timer is an external timer that resets the system if the software fails to operate properly. Option B: The watchdog Timer is an internal timer that sets the system if the software fails to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	Q2.	What is the function of watchdog timer?
fails to operate properly. Option B: The watchdog Timer is an internal timer that sets the system if the software fails to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	-	
to operate properly. Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN		· · · · · · · · · · · · · · · · · · ·
Option C: The watchdog Timer is an internal timer that resets the system if the software fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	Option B:	The watchdog Timer is an internal timer that sets the system if the software fails
fails to operate properly. Option D: The watchdog Timer is an external timer that sets the system if the software fails to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV A,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN		
to operate properly. Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV A,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	Option C:	
Q3. Calculate the jump code for again and here if code starts at 0000H MOV R1,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	Option D:	The watchdog Timer is an external timer that sets the system if the software fails
MOV R1,#0 MOV A,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN		to operate properly.
MOV R1,#0 MOV A,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN		
MOV A,#0 MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN	Q3.	Calculate the jump code for again and here if code starts at 0000H
MOV R0,#25H AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN		MOV R1,#0
AGAIN:ADD A,#0ECH JNC HERE HERE: INC R1 DJNZ R0,AGAIN		MOV A,#0
JNC HERE HERE: INC R1 DJNZ R0,AGAIN		MOV R0,#25H
HERE: INC R1 DJNZ R0,AGAIN		AGAIN:ADD A,#0ECH
DJNZ RO,AGAIN		JNC HERE
		HERE: INC R1
MOV RO,A		DJNZ RO,AGAIN
		MOV RO,A
END		END
Option A: F3,02	Option A:	F3,02

Option B:	F9,01
Option C:	E9,01
Option D:	E3,02
Q4.	Find the number of times the following loop will be executed
	MOV R6,#200
	BACK:MOV R5,#100
	HERE:DJNZ R5, HERE
	DJNZ R6,BACK
	END
Option A:	100
Option B:	2000
Option C:	200
Option D:	20000
05	Which of the following comes under the indexed addressing mode?
Q5.	Which of the following comes under the indexed addressing mode?
Option A:	MOVX A, @DPTR
Option B: Option C:	MOVC @A+DPTR,A MOV A,R0
Option C. Option D:	MOV @RO,A
Орион Б.	MOV @NO,A
Q6.	The instruction to move the data from external memory to accumulator is
Option A:	MOV A, R0
Option B:	MOV B, R0
Option C:	MOVX A, @DPTR
Option D:	MOVX A, R2
Q7.	The instruction MOV A, @R1 perform which operation
Option A:	Copy R1 to accumulator
Option B:	Copy accumulator to R1
Option C:	Copy content of memory to accumulator address pointed by R1
Option D:	Copy accumulator to memory address pointed by R1
Q8.	The content of accumulator after execution of instructions MOV A, #0BH and ANL A, #20H will be
Option A:	11010111
Option B:	11011010
Option C:	00001000
Option D:	0000000

Q9.	On execution of the instructions MOV A, #2B and ORL A, #00H the content of
	accumultor will be
Option A:	1BH
Option B:	2BH
Option C:	3BH
Option D:	4BH
Q10.	The timer and its mode used to set baud rate for serial communication is
Option A:	Timer 1 in mode 2
Option B:	Timer 0 in mode 2
Option C:	Timer 1 in mode 1
Option D:	Timer 0 in mode 0
Q11.	The Xtal frequency best suited to generate baud rates of serial communication
	compatible with PC is
Option A:	12 Mhz
Option B:	11.0592 MHz
Option C:	16 MHz
Option D:	1 Mhz
Q12.	Why do we need a ULN2803 in driving a relay?
Option A:	for switching a motor
Option B:	for decreasing the current limit in the relays
Option C:	for increasing the power
Option D:	for increasing the current limit in the relays
Q13.	A 2° step angle stepper motor is rotated in clockwise direction using full step
	sequence. The no. pulses required to achieve rotation of 80° is
Option A:	40
Option B:	20
Option C:	10
Option D:	80
Q14.	What are the profiles for ARM architecture?
Option A:	A,R
Option B:	A,M
Option C:	A,R,M
Option D:	R,M
Q15.	ARM7 uses stage pipeline
Option A:	2
Option B:	5
Option C:	3
Option D:	6

Q16.	In Von Neumann architecture, which among the following handles all the
Q10.	operations of the system that are inside and outside the processor
Option A:	Input unit
Option B:	Output unit
Option C:	Control unit
Option D:	Memory unit
орион 21	
Q17.	In the ARM, PC is implemented using
Option A:	Caches
Option B:	Heaps
Option C:	General purpose register
Option D:	Stack
Q18.	The instructions which are used to load or store multiple operands are called as
Option A:	Banked instructions
Option B:	Lump transfer instructions
Option C:	Block transfer instructions
Option D:	DMA instructions
Q19.	MRC, MCR are the
Option A:	Co-processor register transfer instructions
Option B:	Thumb instructions
Option C:	Shift instructions
Option D:	Logical Instructions
Q20.	Equivalent of $Rd = NOT(Rm)$ this operation is performed by which instruction
Option A:	MVN
Option B:	NEG
Option C:	EOR
Option D:	TST
Q21.	Status of Z flag after the execution of CMP instruction given below, when R0 = 12; R9 = 12; is CMP R0, R9
Option A:	Z=1
Option B:	Z = 0
Option C:	Same as previous value
Option D:	Z=High Impedance
Q22.	TOTCR stands for
Option A:	Timer 0 Timer count register
Option B:	Timer 0 Timer control register
Option C:	Timer 0 Timer cycle register
Option D:	Timer 0 Timer current register

Q23.	LPC 2148 has32 bit timers/External events.
Option A:	Two
Option B:	Three
Option C:	Four
Option D:	Five
Q24.	What is meaning of VPBDIV=0X00 ?
Option A:	It divides crystal frequency by 4
Option B:	It divides timer frequency by 32
Option C:	It divides Peripheral clock by 32
Option D:	It divides baud rate by 4
Q25.	What is meaning of IOCLR1=0X0000000F?
Option A:	It clears the upper four bits P1.0 to P1.3 of Port 1
Option B:	It clears the all bits of Port 1
Option C:	It clears the lowest four bits P1.0 to P1.3 of Port 1
Option D:	It clears the all bits of Port 0