Program: BE Electronics and Telecommunication Engineering

Curriculum Scheme: Revised 2012

Examination: Third Year Semester V

Course Code: ETC501 Course Name: Microcontrollers & Applications

Time: 1 hour Max. Marks: 50

==========

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

Q1.	In 8051 which interrupt has highest priority?
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.
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
	MOV R0,A
	END

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
Q5.	Which of the following comes under the indexed addressing mode?
Option A:	MOVX A, @DPTR
Option B:	MOVC @A+DPTR,A
Option C:	MOV A,R0
Option D:	MOV @R0,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,@R0 performed operation
Option A:	Copy the data from R0 to A register
Option B:	Copy the data from A register to R0 register
Option C:	Copy the data from internal data ram address pointed by R0 to A register
Option D:	Copy the data from internal data ram address pointed by A to R0 register
Q8.	The instruction MOV P0, #80H will set _____
Option A:	P0.0 = 1
Option B:	P0.3 = 1
Option C:	P0.5 = 1
Option D:	P0.7 = 1
Q9.	DA (decimal adjust) instruction adjust the number to BCD value ____

Option A:	After subtraction
Option B:	Before subtraction
Option C:	After addition
Option D:	Before addition
Q10.	In a common anode 7 segment LED display,
Option A:	All anodes of the seven LED's are connected to Port pins
Option B:	All anodes of the seven LED's are commonly connected to Vcc
Option C:	All cathodes of the seven LED's are commonly connected to Gnd
Option D:	All cathodes of the seven LED's are commonly connected to Vcc
Q11.	For selecting the data register in an LCD program, RS pin should be given
Option A:	1
Option B:	0
Option C:	F
Option D:	High to low pulse
Q12.	The minimum step angle of stepper motor is always a function of
Option A:	No. of teeth on the rotor
Option B:	Load connected
Option C:	Sequence applied
Option D:	Voltage applied
Q13.	Solid relays are advantageous over electromagnetic relays because
Option A:	they need zero voltage circuit
Option B:	they need less current to be energised
Option C:	they need less voltage to be energised
Option D:	They are less costly
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 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
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.	Instruction used to multiply R5 contents by R4 and to store the result into R6 is_____.
Option A:	MUL R6, R5, LSL #2
Option B:	MUL R6, R5, R4
Option C:	MUL R6, R5, LSR #2
Option D:	MUL R5, R6, LSR #2
Q21.	If R1 = 0b1111 , R2 = 0b0101, After BIC R0, R1, R2 is executed
Option A:	R0 = 0b1010
Option B:	R0 = 0b1111
Option C:	R0 = 0b0101
Option D:	R0 = 0b1100
Q22.	The Timer register in LPC 2148 gives it a range of counting from _____
Option A:	0 to 0XFFFFFFFF
Option B:	0 to 0X11111111
Option C:	0 to 0XFFFF
Option D:	0 to 0X1111
Q23.	The first recognized modern embedded system is
Option A:	Apple computer
Option B:	Apollo Guidance Computer
Option C:	Calculator
Option D:	Radio navigation system

Q24.	Which of the following option is correct to send zeros to upper 16 GPIO pins ?
Option A:	IOCLR=0X0000FFFF
Option B:	IOCLR=0XFFFF0000
Option C:	IOPIN=0XFFFF0000
Option D:	IOPIN=0X0000FFFF
Q25.	Which of the following produces an assembler file in the compilation process?
Option A:	pre-processor
Option B:	assembler
Option C:	Compiler
Option D:	post-processing