

University of Mumbai
Examination 2020 under cluster 2 (FrCRCE)

Program: BE Electronics Engineering

Curriculum Scheme: Revised 2012

Examination: Third Year Semester V

Course Code: **EXC501** and Course Name: **Microcontrollers and Applications**

Time: 1 hour

Max. Marks: 50

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

Q1.	RISC stands for _____
Option A:	Restricted Instruction Sequencing Computer
Option B:	Restricted Instruction Sequential Compiler
Option C:	Reduced Instruction Set Computer
Option D:	Reduced Induction Set Computer
Q2.	The internal RAM memory of the 8051 is:
Option A:	32 bytes
Option B:	64 bytes
Option C:	128 bytes
Option D:	256 bytes
Q3.	IN pin of the LCD is used for adjusting its contrast?
Option A:	Pin no 1
Option B:	Pin no 2
Option C:	Pin no 3
Option D:	Pin no 4
Q4.	ARM processors were basically designed for _____
Option A:	Main frame systems
Option B:	Distributed systems
Option C:	Mobile systems
Option D:	Supercomputers
Q5.	What is the instruction set used by ARM7?
Option A:	16-bit instruction set
Option B:	32-bit instruction set
Option C:	64-bit instruction set

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Option D:	8-bit instruction set
Q6.	Name the architecture and the instruction set for microcontroller
Option A:	Van- Neumann Architecture with CISC Instruction Set
Option B:	Harvard Architecture with CISC Instruction Set
Option C:	Van- Neumann Architecture with RISC Instruction Set
Option D:	Harvard Architecture with RISC Instruction Set
Q7.	Why two pins for ground are available in ADC0804?
Option A:	For controlling the ADCON0 and ADCON1 register of the controller
Option B:	For controlling the analog and the digital pins of the controller
Option C:	For both parts of the chip respectively
Option D:	For better DC supply.
Q8.	The ARM7TDMI-S processor has _____ types of memory cycle.
Option A:	5
Option B:	3
Option C:	4
Option D:	2
Q9.	A thermistor is a _____
Option A:	Sensor
Option B:	ADC
Option C:	Transducer
Option D:	Microcontroller
Q10.	The 8051 has _____ parallel I/O ports.
Option A:	2
Option B:	3
Option C:	4
Option D:	5
Q11.	In the ARM, PC is implemented using _____
Option A:	Caches
Option B:	Heaps
Option C:	General purpose register
Option D:	Stack
Q12.	For writing commands on an LCD, RS bit is
Option A:	Set
Option B:	Reset

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Option C:	Set and Reset
Option D:	Connect to Vcc
Q13.	In 8-bit signed number operations, OV flag is set to 1 if:
Option A:	A carry is generated from D7 bit
Option B:	A carry is generated from D3 bit
Option C:	A carry is generated from D7 or D3 bit
Option D:	A carry is generated from D7 or D6 bit
Q14.	The ARM7TDMI-S uses which pipelining?
Option A:	2- Stage
Option B:	3-Stage
Option C:	4-Stage
Option D:	5-Stage
Q15.	For reading operation from an LCD what changes in the software are introduced?
Option A:	Low to high pulse at E pin
Option B:	R/W pin is set high
Option C:	Low to high pulse at E pin & R/W pin is set high
Option D:	R/W pin is set low.
Q16.	The I/O ports that are used as address and data for external memory are:
Option A:	Ports 1 and 2
Option B:	Ports 1 and 3
Option C:	Ports 0 and 2
Option D:	Ports 0 and 3
Q17.	Which of the following commands will copy the contents of RAM whose address is in register 0 to port 1?
Option A:	MOV @ P1, R0
Option B:	MOV @ R0, P1
Option C:	MOV P1, @ R0
Option D:	MOV P1, R0
Q18.	The configuration in which each LED receives operating current of 8 mA from power supply while the port lines sink the current on each port line is
Option A:	Common port configuration
Option B:	Common anode configuration
Option C:	Common cathode configuration
Option D:	Common V _{dd} configuration

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Q19.	XRL, ORL, ANL commands have _____
Option A:	Accumulator as the destination address and any register, memory or any immediate data as the source address
Option B:	Accumulator as the destination address and only immediate data as the source address
Option C:	Any register as the destination address and accumulator, memory or any immediate data as the source address
Option D:	Any register as the destination address and any immediate data as the source address
Q20.	Which devices are specifically being used for converting serial to parallel and from parallel to serial respectively?
Option A:	Timers
Option B:	Counters
Option C:	Registers
Option D:	Serial Communication
Q21.	The additional duplicate register used in ARM machines are called as _____
Option A:	Copied-registers
Option B:	Banked registers
Option C:	Extra registers
Option D:	Existential registers
Q22.	What is the function of the TMOD register?
Option A:	TMOD register is used to set different timer's or counter's to their appropriate modes
Option B:	TMOD register is used to load the count of the timer
Option C:	Is the destination or the final register where the result is obtained after the operation of the timer
Option D:	Is used to interrupt the timer
Q23.	What is the frequency of the clock that is being used as the clock source for the timer?
Option A:	Some externally applied frequency f'
Option B:	Controller's crystal frequency f
Option C:	Controller's crystal frequency /12
Option D:	Externally applied frequency/12
Q24.	ARM stands for _____
Option A:	Advanced Rate Machines

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Option B:	Advanced RISC Machines
Option C:	Artificial Running Machines
Option D:	Aviary Running Machines
Q25.	When the microcontroller executes some arithmetic operations, then the flag bits of which register are affected?
Option A:	PSW
Option B:	SP
Option C:	DPTR
Option D:	PC