

University of Mumbai
Examination 2020 under cluster 9 (FAMT)

These are sample MCQs to indicate pattern, may or may not appeared in examination

Program: BE Electronics and Telecommunication Engineering

Curriculum Scheme: R_2012

Examination: Third Year Semester V

Course Code: ETC 501 and Course Name: Microcontroller 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.	The SP is of ___ wide register. And this may be defined anywhere in the _____.
Option A:	8 byte, on-chip 128 byte RAM.
Option B:	8 bit, on chip 256 byte RAM.
Option C:	16 bit, on-chip 128 byte ROM
Option D:	8 bit, on chip 128 byte RAM.
Q2.	After reset, SP register is initialized to address_____.
Option A:	08h
Option B:	09h
Option C:	07h
Option D:	0Fh
Q3.	What is the address range of SFR Register bank in 8051?
Option A:	00H-77H
Option B:	40H-80H
Option C:	80H-7FH
Option D:	80H-FFH
Q4.	The 8051 microcontroller has _____ bytes of bit-addressable memory.
Option A:	8
Option B:	16
Option C:	32
Option D:	64
Q5.	In 8051 which interrupt has highest priority?
Option A:	IE1
Option B:	TF0
Option C:	IE0
Option D:	TF1

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Q6.	8051 microcontroller has _____ internal RAM & _____ internal ROM:
Option A:	128 Byte, 4KB
Option B:	128 Byte, 8KB
Option C:	64 Byte, 4 KB
Option D:	64 Byte, 8 KB
Q7.	The 8051 can handle _____ interrupt sources. (Excluding RESET)
Option A:	3
Option B:	4
Option C:	5
Option D:	6
Q8.	Which bit/s play/s a significant role in the selection of a bank register of Program Status Word (PSW)?
Option A:	CY AND AC
Option B:	F0 and OV
Option C:	RS0 and RS1
Option D:	OV and P
Q9.	Which bit must be set in TCON register in order to start the 'Timer 0' while operating in 'Mode 0'?
Option A:	TR0
Option B:	TF0
Option C:	IT0
Option D:	IE0
Q10.	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
Q11.	When an interrupt is enabled, then where does the pointer (PC) moves immediately after this interrupt has occurred?
Option A:	to the next instruction which is to be executed
Option B:	to the last instruction of ISR
Option C:	to the first location of the memory called the interrupt vector table
Option D:	to the end of the program
Q12.	8 input DAC has _____
Option A:	8 discrete voltage levels
Option B:	64 discrete voltage levels
Option C:	124 discrete voltage levels
Option D:	256 discrete voltage levels

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Q13.	What is the principle on which electromagnetic relays operate?
Option A:	electromagnetic induction
Option B:	motor control
Option C:	switching
Option D:	On-off-On
Q14.	How many registers are there in ARM7?
Option A:	35 register(28 GPR and 7 SPR)
Option B:	37 registers(28 GPR and 9 SPR)
Option C:	37 registers(31 GPR and 6 SPR)
Option D:	35 register(30 GPR and 5 SPR)
Q15.	How many registers are accessible for ARM7 instruction set?
Option A:	All 15 general purpose
Option B:	8 General purpose registers plus PC
Option C:	8 General purpose registers
Option D:	All 15 general purpose plus PC
Q16.	_____ instruction puts the processor into supervisor mode and begins executing instructions from address 0x08.
Option A:	STMFD
Option B:	LDMFD
Option C:	LDREQB
Option D:	SWI
Q17.	Which among the following data processing instructions does not use the barrel shifter?
Option A:	ADD R2, R5, R4
Option B:	MOV R5, R4, LSL #2
Option C:	MOV r5, R4, LSR #2
Option D:	MOV r5, R4, ROR #2
Q18.	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= Infinite
Q19.	The BEQ instructions is used _____
Option A:	To check the equality condition between the operands and then branch
Option B:	To check if the Operand is greater than the condition value and then branch
Option C:	To check if the flag Z is set to 1 and then causes branch
Option D:	To set THUMB mode if operands are equal

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Q20.	Identify wrong sentence
Option A:	Microprocessor is an IC which has only the CPU
Option B:	Microprocessors don't have RAM, ROM,
Option C:	Microprocessors don't have other peripheral on the chip.
Option D:	Microprocessor are based on Harward achitecture.
Q21.	This is not a Examples of embedded systems
Option A:	Laptop
Option B:	Digital Camera
Option C:	Smart TV
Option D:	Washing Machine
Q22.	What is the maximum capability of addressing the off-chip data memory & off-chip program memory in 8051?
Option A:	8K
Option B:	16K
Option C:	32K
Option D:	64K
Q23.	After reset of 8051, all ports are written with
Option A:	00H
Option B:	FFh
Option C:	77h
Option D:	AAh
Q24.	The 8051 can handle _____ interrupt sources. (Excluding Reset)
Option A:	3
Option B:	4
Option C:	5
Option D:	6
Q25.	8051 has ____ full duplex serial Port
Option A:	3
Option B:	2
Option C:	1
Option D:	0