

University of Mumbai
Examination 2020 under cluster 4 (PCE)

Program: BE Information Technology

Curriculum Scheme: Rev2016

Examination: Third Year Semester V

Course Code:ITC501 and Course Name: Microcontroller and Embedded Programming

Time: 1 hour

Max. Marks: 50

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

Q1.	Name a volatile memory.
Option A:	RAM
Option B:	ROM
Option C:	EPROM
Option D:	EEPROM
Q2.	Which signal is sampled at regular intervals for the purpose of DAC?
Option A:	analog signal
Option B:	digital signal
Option C:	quantised signal
Option D:	sampled signal
Q3.	PSEN stands for
Option A:	Program Select Enable
Option B:	Peripheral Store Enable
Option C:	Program Store Enable
Option D:	Peripheral Select Enable
Q4.	Which of the following instruction comes under the indexed addressing mode?
Option A:	MOVX A, @DPTR
Option B:	MOVC A, @A+DPTR
Option C:	MOV A,R0
Option D:	MOV @R0,A
Q5.	Bit-addressable memory locations are:
Option A:	00H through 1FH
Option B:	20H through 2FH
Option C:	30H through 7FH
Option D:	40H through 4FH
Q6.	What is the relation between Crystal frequency f and Timer frequency
Option A:	f/32
Option B:	f/12
Option C:	f/64
Option D:	f/8
Q7.	Which of the following best states the reason that why baud rate is mentioned in serial communication?
Option A:	To know about the no of bits being transmitted per second
Option B:	To make the two devices compatible with each other, so that the transmission

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	becomes easy and error free
Option C:	To use Timer 1
Option D:	For wasting memory
Q8.	Which bit of the IE register is used to enable serial communication interrupt?
Option A:	IE.D5
Option B:	IE.D2
Option C:	IE.D3
Option D:	IE.D4
Q9.	In 8051 which interrupt has highest priority?
Option A:	RI/TI
Option B:	TF0
Option C:	INT1
Option D:	TF1
Q10.	How many minimum number of pins are required to interface 64 keys to 8051
Option A:	64 pins
Option B:	8 pins
Option C:	16 pins
Option D:	32 pins
Q11.	While programming the Successive Approximation type ADC 0804 what steps are followed?
Option A:	Select the analog channel, start the conversion, monitor the conversion, display the digital results
Option B:	select the analog channel, activate the ALE signal (L to H pulse), start the conversion, monitor the conversion, read the digital results
Option C:	select the analog channel, activate the ALE signal (H to L pulse), start the conversion, monitor the conversion, read the digital results
Option D:	select the channel, start the conversion, end the conversion
Q12.	How many pins of the 8255 can be used as the I/O ports?
Option A:	8
Option B:	16
Option C:	24
Option D:	32
Q13.	ARM processor has ____ bit address bus
Option A:	8bit
Option B:	16 bit
Option C:	32 bit
Option D:	64bit
Q14.	The ARM7 uses which pipelining?
Option A:	2-Stage
Option B:	3-Stage
Option C:	4-Stage

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Option D:	5-Stage
Q15.	Word data type of ARM7 must begin at the address that is multiple of _____
Option A:	2
Option B:	8
Option C:	16
Option D:	4
Q16.	To invoke a subroutine which is written in thumb state, we used instruction _____
Option A:	BL
Option B:	BIC
Option C:	BEQ
Option D:	BLX
Q17.	In Arm Processor, Which register stores the return address to main program after executing subroutine in CALL?
Option A:	PC
Option B:	LR
Option C:	SP
Option D:	flag
Q18.	What is the name of the operating system that reads and reacts in terms of actual time.
Option A:	Batch system
Option B:	Quick response system
Option C:	Real time system
Option D:	Time sharing system
Q19.	Some of the properties of real time systems include :
Option A:	single purpose
Option B:	inexpensively mass produced
Option C:	small size
Option D:	all of the mentioned
Q20.	The _____ becomes the name of the root of the newly mounted directory.
Option A:	root of the previous directory
Option B:	local directory
Option C:	remote directory itself
Option D:	none of the mentioned
Q21.	When will file system fragmentation occur?
Option A:	unused space or single file are not contiguous
Option B:	used space is not contiguous
Option C:	unused space is non-contiguous
Option D:	multiple files are non-contiguous
Q22.	What is the processor used by ARM7?

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Option A:	32-bit RISC
Option B:	8-bit RISC
Option C:	32-bit CISC
Option D:	8-bit CISC
Q23.	How many digital pins are there on the UNO board?
Option A:	14
Option B:	12
Option C:	16
Option D:	20
Q24.	Which one of the following has a real time clock?
Option A:	Arduino
Option B:	Raspberry Pi 3
Option C:	Galileo Gen 2
Option D:	Raspberry Pi
Q25.	MQTT stands for
Option A:	Management Queue Telemetry Transport
Option B:	Management Queuing Telemetry Transport
Option C:	Messaging Queue Telemetry Transport
Option D:	Message Queuing Telemetry Transport

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Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	A
Q2.	B
Q3.	C
Q4	B
Q5	B
Q6	B
Q7	B
Q8.	D
Q9.	B
Q10.	C
Q11.	B
Q12.	C
Q13.	C
Q14.	B
Q15.	D
Q16.	D
Q17.	B
Q18.	C
Q19.	D
Q20.	B
Q21.	A
Q22.	C
Q23.	A
Q24.	C

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Q25.	C
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