

Program: BE Information Technology
Curriculum Scheme: Revised 2016
Examination: Third Year Semester V
Course Code: ITC501 and Course Name: Microcontroller and Embedded Programming

Time: 1 hour

Max.

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

CISC stands for _____
Complex Instruction set computer
Complete Instruction Set Computer
Complete Instruction Set Component
Complex Instruction set component
Which one of the following is not associated with CISC processor
variable length instructions
large number of instructions
hardwired control unit
more number of instruction for accessing memory
Which one of the following is not associated with RISC processor
variable length instructions
hardwired control unit
fewer instructions
less number of instruction that access memory
Which of the following is not an example of a "small-scale embedded system"?
toy car
washing machine
microwave
mobile phone
LJMP enables you to jump
witjin internal RAM only
within a 2K range only
Anywhere in 64K memory space
128 locations
DJNZ stands for
Decrement Jump if not zero
Do not Jump if Zero
Do not Jump if not Zero
Decimal Jump Not Zero

What is the period of the machine cycle of 8051 if crystal frequency is 16MHZ
0.75 us(micro second)
1us
1.085us
1.33us
Which instruction is useful for code access
MOVC A,@A+DPTR
MOVx A,@DPTR
MOV A,@Ri
MOVX A,@Ri
When EA bit in interrupt enable register =0, then
All interrupts are enabled
The highest priority interrupt is enabled
The lowest priority interrupt is enabled
All interrupts are blocked
Which of the following is not a component of a stepper motor?
Windings
Rotor
Commutator
Stator
How can we control the speed of a stepper motor?
by controlling its switching rate
by controlling its torque
by controlling its wave drive 4 step sequence
Speed is fixed
If a motor takes 90 steps to make one complete revolution, what is the step angle for this motor?
2
1
4
8
What is the number of steps per revolution of stepper motor if step angle is 7.5degree
48
96
24
75
Full form of RISC _____
Restricted Instruction Sequencing Computer
Restricted Instruction Sequential Compiler

Reduced Instruction Set Computer
Reduced Induction Set Computer
contained in R0 and R1, and place the result in R4 and R5?
ADD r4, r0, r2 ; ADC r5, r1, r3 ;
ADDS r4, r0, r2 ; ADCS r5, r1, r3 ;
ADD r4, r0, r2 ; ADD r5, r1, r3 ;
ADD r4, r0, r2 ; ADCS r5, r1, r3 ;
In which addressing mode " EA of the operand is the contents of Rn"?
Pre-indexed mode
Pre-indexed with write back mode
Post-indexed mode
Only Indexed mode
Which is effective address of the instruction written in Post-indexed mode, MOVE[Rn]+Rm?
EA = [Rn]
EA = [Rn + Rm]
EA = [Rn] + Rm
EA = [Rm] + Rn
program?
R1
R5
R15
R8
Ensuring two or more task access a shared resources without corrupting data is known as _____.
inclusive exclusion
mutual exclusion
sophisticated exclusion
complex exclusion
The mechanism for which task to execute at any point is called _____.
multitasking
task scheduling
execution sequencing
sequencing
The scheduling in which each task gets its turn after all other task given there task one by one is
Round robin scheduling
Rate monotonic scheduling
FIFO scheduling
non-pre-emptive scheduling
What is the microcontroller used in Arduino UNO

ATmega328p
ATmega2560
ATmega32114
AT91SAM3x8E
_____ are pre built circuit boards that fit on top of Android.
Sensor
Data types
Breadboard
Sheilds
In a multiprogramming environment _____
more than one process resides in the memory
the processor executes more than one process at a time
a single user can execute many programs at the same time
the programs are developed by more than one person
How is the power supplied to Raspberry Pi
USB connection
Internal battery
alkaline battery
directly connecting to 230v 50HZ mains