CS401 Computer Architecture and Assembly Language
Quiz No.2 May 02, 2012

Question # 2 of 10 (Start time: 05:33:39 PM)   **Total Marks:** 1

A _____ is an area of memory that holds all local variables and parameters used by any function and remembers the order in which functions are called so that function returns occur correctly.

Select correct option:

○ Instruction Pointer

○ Stack   OK

○ Data Segment

○ Base Register

Both DS and ES can be used to access the video memory. However we commonly keep DS for accessing our data, and load ES with the segment of video memory.
Select correct option:

True
False
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Question # 2 of 10 (Start time: 03:17:23 PM) Total Marks: 1
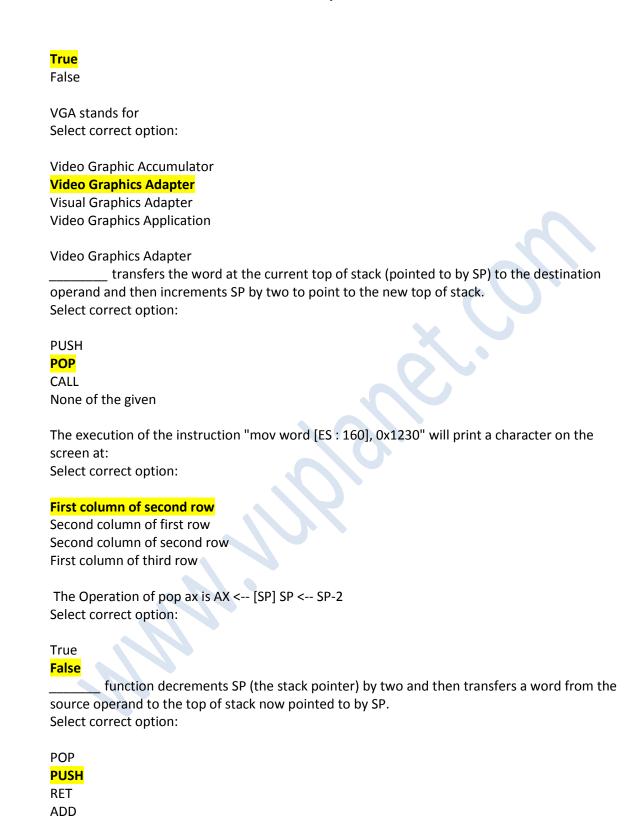How many characters standard ASCII has?
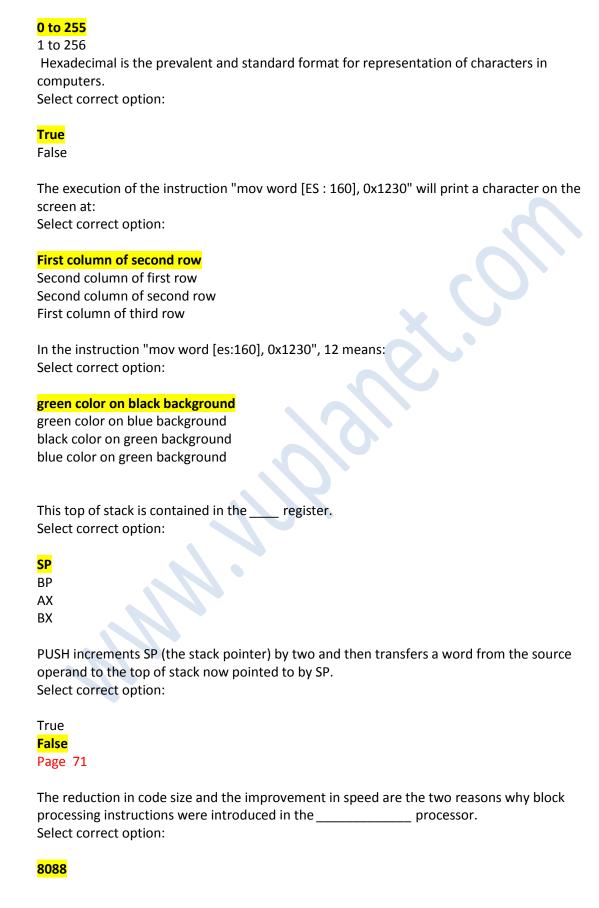Select correct option:

512
256
128
64

During the CALL operation, the current value of the instruction pointer is automatically saved on the stack, and the destination of CALL is loaded in the instruction pointer.
Select correct option:

True
False

VGA stands for
Select correct option:

Video Graphic Accumulator
Video Graphics Adapter
Visual Graphics Adapter
Video Graphics Application

Video Graphics Adapter
_____ transfers the word at the current top of stack (pointed to by SP) to the destination operand and then increments SP by two to point to the new top of stack.
Select correct option:

PUSH
POP
CALL
None of the given

The execution of the instruction "mov word [ES : 160], 0x1230" will print a character on the screen at:
Select correct option:

First column of second row
Second column of first row
Second column of second row
First column of third row

The Operation of pop ax is AX <-- [SP] SP <-- SP-2
Select correct option:

True
False

_____ function decrements SP (the stack pointer) by two and then transfers a word from the source operand to the top of stack now pointed to by SP.
Select correct option:

POP
PUSH
RET
ADD

Far calls are called intra segment calls.
Select correct option:

True
False

STOS is often used to clear a block of memory or fill it with a constant.
Select correct option:

True
False
How many characters were defined by standard ASCII?
Select correct option:
132
124
122
128

Stack clearing by the caller needs an extra instruction on behalf of the caller after every call made to the subroutine, unnecessarily increasing instructions in the program.
Select correct option:

True
False

The direction of movement is controlled with the _____in the flags register. If this flag is cleared the direction is from lower addresses towards higher addresses and if this flag is set the direction is from higher addresses to lower addresses.
Select correct option:

Direction Flag (DF)
Control Flag (CF)
Carry Flag (CF)
Non of above

ASCII stands for_____.
Select correct option:

American Standard Code for Information Interaction
American Standard Code for Information Interchange
American Standard Communication for Integer Interchange
American Scientific Communication for Integer Interaction
During the CALL operation, the current value of the instruction pointer is automatically saved on the stack, and the destination of CALL is loaded in the instruction pointer.
Select correct option:

Extended ASCII has 256 characters with assigned numbers from
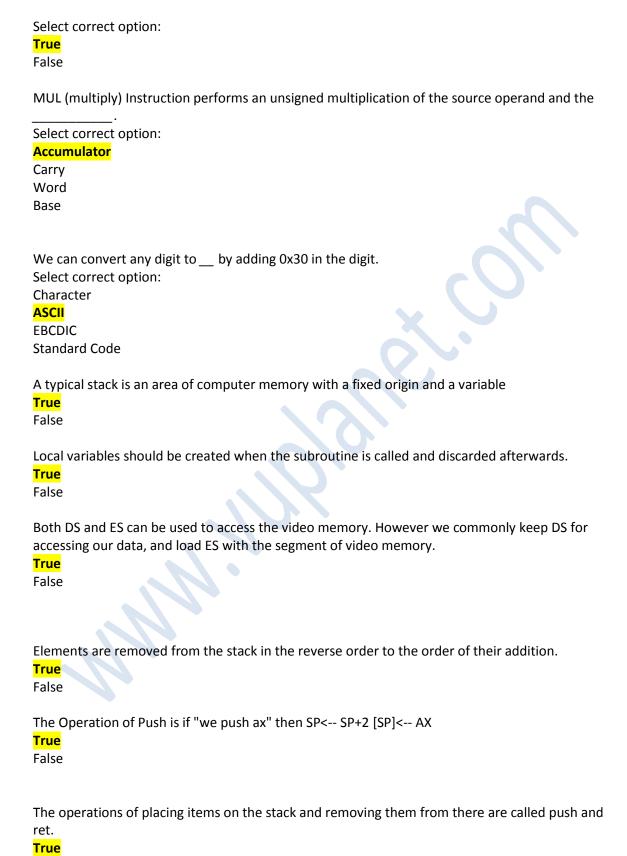Select correct option:

1 to 255
0 to 256

==0 to 255==
1 to 256
 Hexadecimal is the prevalent and standard format for representation of characters in computers.
Select correct option:

==True==
False

The execution of the instruction "mov word [ES : 160], 0x1230" will print a character on the screen at:
Select correct option:

==First column of second row==
Second column of first row
Second column of second row
First column of third row

In the instruction "mov word [es:160], 0x1230", 12 means:
Select correct option:

==green color on black background==
green color on blue background
black color on green background
blue color on green background

This top of stack is contained in the _____ register.
Select correct option:

==SP==
BP
AX
BX

PUSH increments SP (the stack pointer) by two and then transfers a word from the source operand to the top of stack now pointed to by SP.
Select correct option:

True
==False==
Page 71

The reduction in code size and the improvement in speed are the two reasons why block processing instructions were introduced in the _____ processor.
Select correct option:

==8088==

8085
8080
iAPX386

MOVS is used to _____ a block of memory.
Select correct option:

Save
Move
Delete
Push

The operation of PUSH is not similar to CALL however with a register other than the instruction pointer.
Select correct option:

True
False
Reference: operation of PUSH is similar to CALL however with
a register other than the instruction pointer. page 69

Both DS and ES can be used to access the video memory. However we commonly keep DS for accessing our data, and load ES with the segment of video memory.
Select correct option:

True
False

Which bit of the attributes byte represents the blue component of foreground color ?
Select correct option:

0
1
2
3

SCAS compares a source byte or word in register AL or AX with the _____ string element addressed by ES: DI and updates the flags.
Source
Destination
Flag
Register
page 92

An element is pushed on the stack SP is decremented by _____ as the 8088 stack works on word sized elements.
Three

two
four
five
page 68

To access the arguments from the stack, the immediate idea that strikes is to _____ them off the stack.
  push
 pop
  add
  insert

We use _____ to access the parameters that are stay on the stack with out popping them.
pop
DS not sure
PUSH
BP

How many characters were defined by standard ASCII?
132
124
128

ASCII table is the contiguous arrangement of the uppercase alphabets (41-5A), the lowercase alphabets (61-7A), and the numbers _____
31-40
29-39
30-39
page no 80

The purpose of MOVS instruction is to move a memory location to register
True
False

_____ decrements SP (the stack pointer) by two and then transfers a word from the source operand to the top of stack now pointed to by SP.
push
pop
call
None

This top of stack is contained in the _____ register.
SP
BP
AX

To access the arguments from the stack, the immediate idea that strikes is to _____ them off the stack.
Select correct option:

Push
Pop
Add
Insert

Parameters clears from the stack by the
Select correct option:
caller
callee
caller and callee
None of the given

There are just ____ block processing instructions in 8088.
Select correct option:
6
5
4
3

_____ decrements SP (the stack pointer) by two and then transfers a word from the source operand to the top of stack now pointed to by SP.
Select correct option:
PUSH
POP
CALL
None of the Above

The operation of PUSH is not similar to CALL however with a register other than the instruction pointer.
Select correct option:
True
False

The direction of movement is controlled with the _____in the flags register. If this flag is cleared the direction is from lower addresses towards higher addresses and if this flag is set the direction is from higher addresses to lower addresses.
Select correct option:
Direction Flag (DF)
Control Flag (CF)
Carry Flag (CF)
Non of above

Hexadecimal is the prevalent and standard format for representation of characters in computers.

Select correct option:
True
False

MUL (multiply) Instruction performs an unsigned multiplication of the source operand and the
_____ .
Select correct option:
Accumulator
Carry
Word
Base

We can convert any digit to __ by adding 0x30 in the digit.
Select correct option:
Character
ASCII
EBCDIC
Standard Code

A typical stack is an area of computer memory with a fixed origin and a variable
True
False

Local variables should be created when the subroutine is called and discarded afterwards.
True
False

Both DS and ES can be used to access the video memory. However we commonly keep DS for
accessing our data, and load ES with the segment of video memory.
True
False

Elements are removed from the stack in the reverse order to the order of their addition.
True
False

The Operation of Push is if "we push ax" then SP<-- SP+2 [SP]<-- AX
True
False

The operations of placing items on the stack and removing them from there are called push and
ret.
True
False

A _____ is an area of memory that holds all local variables and parameters used by any function and remembers the order in which functions are called so that function returns occur correctly.
Instruction Pointer
Stack
Data Segment
Base Register

Stack is a data structure that behaves in a first in last _____ manner.
In
Out
Push
Add

RET do not pops the word at the top of the stack (pointed to by register SP) into the instruction pointer but increments SP by two.
True
False