



CS401 Assembly Language
Solved MCQS
From Midterm Papers

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PSMD01(IEMS)

MIDTERM FALL 2011
CS401 Assembly Language

Question No:1 (Marks: 1) - Please choose one

The first instruction of “COM” file must be at offset:

- ▶ 0x0010
- ▶ **0x0100** (Page 19)
- ▶ 0x1000
- ▶ 0x0000

Question No:2 (Marks: 1) - Please choose one

The execution of the instruction “mov word [ES : 0], 0x0741” will print character “A” on screen , background color of the screen will be

- ▶ **Black** (Page 81)
- ▶ White
- ▶ Red
- ▶ Blue

Question No:3 (Marks: 1) - Please choose one

The iAPX888 architecture consists of _____ register.

- ▶ 12
- ▶ 14
- ▶ **16** (Page 15)
- ▶ 18

Question No:4 (Marks: 1) - Please choose one

The execution of the instruction “mov word [ES: 0], 0x0741” will print “A” on the screen, color of the character will be

- ▶ Black
- ▶ **White** (Page 81)
- ▶ Red
- ▶ Blue

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Question No:5 (Marks: 1) - Please choose one

One screen location corresponds to a

- ▶ Byte
- ▶ **Word (Page 80)**
- ▶ Double byte
- ▶ Double word

Question No:6 (Marks: 1) - Please choose one

When an item is pushed on the decrementing stack, the top of the stack is

- ▶ **First decremented and then element copied on to the stack (Page 68)**
- ▶ First incremented and then element copied on to the stack
- ▶ Decrement after the element copied on to the stack
- ▶ Incremented after the element copied on to the stack

Question No:7 (Marks: 1) - Please choose one

Each screen location corresponds to a word, the lower byte of this word contains _____

- ▶ **The character code (Page 81)**
- ▶ The attribute byte
- ▶ The parameters
- ▶ The dimensions

Question No:8 (Marks: 1) - Please choose one

if ax contains decimal -2 and BX contains decimal 2 then after the execution of instructions: `CMP AX, BX`, `JN label`

- ▶ Jump will be taken
- ▶ Zero flag will set
- ▶ ZF will contain value -4
- ▶ **Jump will not be taken (rr)**

Question No:9 (Marks: 1) - Please choose one

If D is "35" is shift to left 2 bits the new value

- ▶ 35
- ▶ 70
- ▶ 140
- ▶ 17

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Question No:10 (Marks: 1) - Please choose one

When two 16bit numbers are added the answer can be 17 bits long, this extra bit that won't fit in the target register is placed in the where it can be used and tested

▶ **carry flag** (Page 16)

- ▶ Parity Flag
- ▶ Auxiliary Carry
- ▶ Zero Flag

Question No: 11 (Marks: 1) - Please choose one

Only instructions allow moving data from memory to memory.

▶ **string** (Page 29)

- ▶ word
- ▶ indirect
- ▶ stack

Question No:12 (Marks: 1) - Please choose one

When a 16 bit number is divided by an 8 bit number, the quotient will be in

▶ **AL** (Page 85)

- ▶ AX
- ▶ AH
- ▶ DX

Question No:13 (Marks: 1) - Please choose one

Which bit of the attributes byte represents the red component of background color ?

- ▶ 3
- ▶ 4
- ▶ 5
- ▶ **6** (Page 81)

Question No:14 (Marks: 1) - Please choose one

| 0 | --> | 1 | 1 | 0 | 1 | 0 | 0 | 0 | --> | C | is a example of _____

- ▶ Shl
- ▶ sar
- ▶ **Shr** (Page 52)
- ▶ Sal

Question No:15 (Marks: 1) - Please choose one

allow changing specific processor behaviors and are used to play with it.

▶ **Special Instructions** (Page 14)

- ▶ Data Movement Instructions
- ▶ Program Control Instructions
- ▶ Arithmetic and Logic Instructions

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Question No:16 (Marks: 1) - Please choose one

8088 is a 16bit processor with its accumulator and all registers of _____.

▶ 32 bits

▶ 6 bits

▶ **16 bits** (Page 14)

▶ 64 bits

Question No:17 (Marks: 1) - Please choose one

decrements SP (the stack pointer) by two and then transfers a word from the source operand to the top of stack

▶ **PUSH** (Page 71)

▶ POP

▶ CALL

▶ RET

MIDTERM 2011

CS401 Assembly Language

1. In instruction ADC the operands can be

- Two register only
- Two register and one memory location
- CF and two other operands** (Page 57)
- ZF and two other operands

2. After the execution of instruction “RET”

- SP is incremented by 2** (Page 66)
- SP is decremented by 2
- SP is incremented by 1
- SP is decremented by 1

3. The extended ASCII has

- 64 characters
- 128 characters** (Page 79)
- 256 characters
- 502 characters

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4. **The second byte in the word designated for screen location holds**
- The dimension of the screen
 - Character position on the screen
 - **Character color on the screen** (Page 81)
 - ACSII code of the character
5. **REP will always**
- Incremented CX by 1
 - Incremented CX by 2
 - **Decrement CX by 1** (Page 92)
 - Decrement CX by 2
6. **The routine that executes in response to an INT instruction is called**
- **ISR** (Page 103)
 - IRS
 - ISP
 - IRT
7. **The iAPX888 architecture consists of _____ register.**
- 12
 - 14
 - **16** (Page 15) Rep
 - 18
8. **In the instruction “CMP AX,BX” the contents of**
- AX are changed
 - BX are changed
 - CX are changed
 - **Flag register are changed** (Page 39)
9. **All the addressing mechanisms iniAPX88 return a number called _____ address.**
- **Effective** (Page 33)
 - faulty
 - indirect
 - direct
10. **The execution of the instruction “mov word [ES: DI], 0x0720”**
- **will clear next character on screen** (Page 82)
 - will print “20” at top left of the screen
 - will print “20” at top right of the screen
 - will move DI at location 0720 on the screen

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11. “mov byte [num1],5” is _____ instruction.

- legal
- illegal** (Page 30)
- stack based
- memory indirect

12. MOV instruction transfers a byte or word from which of the following source location.

- DS:DI
- ES:SI
- ES:DI** (Page 92)
- DS:SI

13. The execution of the instruction “mov word [ES: 0], 0x0741” will print “A” on the screen, color of the character will be

- Black
- White** (Page 81) rep
- Red
- Blue

14. If AX contains FFFFh, then after execution of instruction “SAL ax, 3”, the result will be

- 3
- +3
- 8
- +8

15. If the decimal number “35” is shifted by two bit to left, the new value will be

- 35
- 70
- 140
- 17

16. While using STOBS, if DF=1 then

- The value of SI will be incremented by one
- The value of SI will be incremented by two
- The value of SI will be decremented by one** [click here for detail](#)
- The value of SI will be decremented by two

17. After the execution of STOSW, the CX will be

- Decrement by 1
- Decrement by 2** (Page 92)
- Increment by 1
- Increment by 2

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18. The memory address always move from

- processor to memory
- memory to processor
- memory to peripheral
- peripheral to processor

19. An offset alone is not complete without

- Segment** (Page 34)
- code label
- index register
- data label

20. Code Segment is associated to _____ register by default.

- IP** (Page 34)
- SS
- BP
- CX

MIDTERM SPRING 2011 CS401 Assembly Language

Question No:1 (Marks: 1) - Please choose one

After the execution of SAR instruction:

- ▶ MSB remain as it is
- ▶ MSB Will change
- ▶ **MSB move to left** (Page 52)
- ▶ No change will occur.

Question No:2 (Marks: 1) - Please choose one

ASCII stands for _____.

The screen is two dimensional space having:

- ▶ **25 Rows and 25 Columns** (Page 80)
- ▶ 25 Rows and 80 Columns
- ▶ 80 Rows and 80 Columns
- ▶ 80 Rows and 25 Columns

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Question No:3 (Marks: 1) - Please choose one

In the Rotate Right Operation every bit moves one position to right and the bit dropped from the right is inserted at the left and:

▶ **Dropped in CF** (Page 53)

- ▶ moves to AL
- ▶ Don't go anywhere.

Question No:4 (Marks: 1) - Please choose one

_____ of the following flags will be affected by MOVSB?

- ▶ DF
- ▶ ZF
- ▶ PF
- ▶ No effect on flags.

Question No:5 (Marks: 1) - Please choose one

The iAPX88 processor supports _____ modes of memory access.

- ▶ 5
- ▶ 6
- ▶ **7** (Page 35)
- ▶ 8

MIDTERM FALL 2010

Question No:1 (Marks: 1) - Please choose one

Stack is a _____ that behaves in a first in last out manner.

- ▶ Program
- ▶ **data structure** (Page 67)
- ▶ Heap
- ▶ None of the Given

Question No:2 (Marks: 1) - Please choose one

The physical address of the stack is obtained by

- ▶ SS:SI combination
- ▶ **SS:SP combination** (Page 68)
- ▶ ES:BP combination
- ▶ ES:SP combination

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Question No:3 (Marks: 1) - Please choose one

Foreground and background parameter will be

- ▶ 32bits
- ▶ 16bits
- ▶ 8bits
- ▶ 4bits

Question No:4 (Marks: 1) - Please choose one

The clear screen operation initialize whole block of memory

- ▶ 0741
- ▶ 0417
- ▶ 0714

▶ **0174, 0720** (Page 91)

Question No:5 (Marks: 1) - Please choose one

In STOSB instruction, when DF is Set, SI is

- ▶ Incremented by 1
- ▶ Incremented by 2
- ▶ Decrement by 1 (Not confirmed)
- ▶ Decrement by 2

Question No:6 (Marks: 1) - Please choose one

Assembly language is:

▶ **Low-level programming language**

[Click here for detail](#)

- ▶ High-level programming language
- ▶ Also known as machine language
- ▶ Not considered closer to the computer

Question No:7 (Marks: 1) - Please choose one

A 32 Bit processor has accumulator of -----

- ▶ 8 bit
- ▶ 16 bit
- ▶ **32 bit**
- ▶ 64 bit

(Page 12)

Question No:8 (Marks: 1) - Please choose one

To transfer control back the RET instruction take

- ▶ 1 argument
- ▶ 1 argument
- ▶ **3 arguments**
- ▶ No arguments

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Question No:9 (Marks: 1) - Please choose one

RET is executed, it recovers the values from

- ▶ Register
- ▶ **Stack (Page 71)**
- ▶ Data segment
- ▶ Code segment

Question No:10 (Marks: 1) - Please choose one

To convert any digit to its ASCII representation

- ▶ **Add 0x30 in the digit (Page 80)**
- ▶ Subtract 0x30 from the digit
- ▶ Add 0x61 in the digit
- ▶ Subtract 0x61 from the digit

Question No:11 (Marks: 1) - Please choose one

The prevalent convention in most high level languages is stack clearing by the

- ▶ Caller
- ▶ **Callee (Page 74)**
- ▶ RET
- ▶ Stack

Question No:12 (Marks: 1) - Please choose one

After execution of JCXZ instruction CX will changed with flag affect.

- ▶ CF
- ▶ OF
- ▶ DF
- ▶ **None of Above (Page 43)**

Question No:13 (Marks: 1) - Please choose one

Execution of the instruction “mov word [ES : 0], 0x0741” will print

- ▶ **“A” appear on the top left of screen (Page 81)**
- ▶ “A” appear on the top right of screen
- ▶ “A” appear on the center of screen
- ▶ “A” appear on the bottom left of screen

Question No:14 (Marks: 1) - Please choose one

if contains decimal -2 and BX contains decimal 2 then after the execution of instructions:

CMP AX, BX

JA label

- ▶ Jump will be taken

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- ▶ Zero flag will set
- ▶ ZF will contain value -4
- ▶ **Jump will not be taken**

Question No:15 (Marks: 1) - Please choose one

Which of the following options contain the set of instructions to open a window to the video memory?

- ▶ mov AX, 0xb008
mov ES, AX
- ▶ **mov AX, 0xb800
mov ES, AX** (Page 81) rep
- ▶ mov AX, 0x8b00
mov ES, AX
- ▶ mov AX, 0x800b
mov ES, AX

Question No:16 (Marks: 1) - Please choose one

If D is "35" is shift to left 2 bits the new value

- ▶ 35
- ▶ 70
- ▶ 140
- ▶ 17

Question No:17 (Marks: 1) - Please choose one

Execution of the instruction "mov word [ES : 0], 0x1230" will print the character color will

- ▶ **Green**
- ▶ White
- ▶ Red
- ▶ Black

MIDTERM EXAMINATION **Spring 2010**

Question No: 1 (Marks: 1) - Please choose one

After the execution of SAR instruction

- ▶ The msb is replaced by a 0
- ▶ The msb is replaced by 1
- ▶ The msb retains its original value
- ▶ The msb is replaced by the value of CF

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Question No: 2 (Marks: 1) - Please choose one

RETF will pop the offset in the

- ▶ BP
- ▶ **IP** (Page 69)
- ▶ SP
- ▶ SI

Question No: 3 (Marks: 1) - Please choose one

The routine that executes in response to an INT instruction is called

- ▶ **ISR** (Page 103) rep
- ▶ IRS
- ▶ ISP
- ▶ IRT

Question No: 4 (Marks: 1) - Please choose one

The first instruction of “COM” file must be at offset:

- ▶ 0x0010
- ▶ **0x0100** (Page 19) rep
- ▶ 0x1000
- ▶ 0x0000

Question No: 5 (Marks: 1) - Please choose one

“Far” jump is not position relative but is _____

- ▶ memory dependent
- ▶ **Absolute** (Page 46)
- ▶ Temporary
- ▶ indirect

Question No: 6 (Marks: 1) - Please choose one

Only _____ instructions allow moving data from memory to memory.

- ▶ **string** (Page 29) rep
- ▶ word
- ▶ indirect
- ▶ stack

Question No: 7 (Marks: 1) - Please choose one

After the execution of instruction “RET 2”

- ▶ SP is incremented by 2

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▶ **SP is decremented by 2** (Page 66) rep

- ▶ SP is incremented by 4
- ▶ SP is decremented by 4

Question No: 8 (Marks: 1) - Please choose one

DIV instruction has

▶ **Two forms** (Page 85)

- ▶ Three forms
- ▶ Four forms
- ▶ Five forms

Question No: 9 (Marks: 1) - Please choose one

When the operand of DIV instruction is of 16 bits then implied dividend will be of

▶ **8 bits** (Page 85)

- ▶ 16 bits
- ▶ 32 bits
- ▶ 64 bits

Question No: 10 (Marks: 1) - Please choose one

After the execution of MOVS instruction which of the following registers are updated

- ▶ SI only
- ▶ DI only
- ▶ **SI and DI only** (Page 92)
- ▶ SI, DI and BP only

Question No: 11 (Marks: 1) - Please choose one

In 8088 architecture, whenever an element is pushed on the stack

- ▶ SP is decremented by 1
- ▶ **SP is decremented by 2** (Page 68)
- ▶ SP is decremented by 3
- ▶ SP is decremented by 4

Question No: 12 (Marks: 1) - Please choose one

When a very large number is divided by very small number so that the quotient is larger than the space provided, this is called

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- ▶ Divide logical error
- ▶ **Divide overflow error** (Page 85)
- ▶ Divide syntax error
- ▶ An illegal instruction

Question No: 13 (Marks: 1) - Please choose one

In the word designated for one screen location, the higher address contains

- ▶ The character code
- ▶ **The attribute byte** (Page 81)
- ▶ The parameters
- ▶ The dimensions

Question No: 14 (Marks: 1) - Please choose one

Which of the following options contain the set of instructions to open a window to the video memory?

- ▶ mov AX, 0xb008
mov ES, AX
- ▶ **mov AX, 0xb800**
mov ES, AX (Page 81) rep
- ▶ mov AX, 0x8b00
mov ES, AX
- ▶ mov AX, 0x800b
mov ES, AX

Question No: 15 (Marks: 1) - Please choose one

In a video memory, each screen location corresponds to

- ▶ One byte
- ▶ Two bytes
- ▶ Four bytes
- ▶ Eight bytes

Question No: 16 (Marks: 1) - Please choose one

The execution of the instruction “mov word [ES : 0], 0x0741” will print character “A” on screen , background color of the screen will be

- ▶ **Black** (Page 81) rep
- ▶ White
- ▶ Red
- ▶ Blue

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Question No:1 (Marks: 1) - Please choose one

One screen location corresponds to a

- ▶ Byte
- ▶ **Word** (Page 80) rep
- ▶ Double byte
- ▶ Double word

Question No:2 (Marks: 1) - Please choose one

After the execution of "PUSH AX" statement

- ▶ AX register will reside on the stack
- ▶ **A copy of AX will go on the stack** (Page 69)
- ▶ The value of AX disappear after moving on stack
- ▶ Stack will send an acceptance message

Question No:3 (Marks: 1) - Please choose one

physical address of the stack is obtained by

- ▶ SS:SP combination
- ▶ SS:SI combination
- ▶ **SS:SP combination** (Page 68) rep
- ▶ ES:BP combination
- ▶ ES:SP combination

Question No:4 (Marks: 1) - Please choose one

If the address of memory location Num1 is 0117 and its content is 0005 then after execution of the instruction "mov bx, Num1" bx will contain

- ▶ 0005
- ▶ **0117** (Page 30)
- ▶ Num1
- ▶ 1701

Question No:5 (Marks: 1) - Please choose one

In STOS instruction, the implied source will always be in

- ▶ **AL or AX registers** (Page 92)
- ▶ DL or DX registers
- ▶ BL or BX registers
- ▶ CL or CX registers

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Question No:6 (Marks: 1) - Please choose one

The shift logical right operation inserts

A zero at right

A zero at left (Page 52)

A one at right

A one at right

Question No:7 (Marks: 1) - Please choose one

REP will always

Increment CX by 1

Increment CX by 2

Decrement CX by 1 (Page 92) rep

Decrement CX by 2

Question No:8 (Marks: 1) - Please choose one

When an item is pushed on the decrementing stack, the top of the stack is

▶ **First decremented and then element copied on to the stack** (Page 68) rep

▶ First incremented and then element copied on to the stack

▶ Decrement after the element copied on to the stack

▶ Incremented after the element copied on to the stack

Question No:9 (Marks: 1) - Please choose one

assembly the CX register is used normally as a _____ register.

▶ source

▶ **counter** (Page 32)

▶ index

▶ pointer

Which is the unidirectional bus ?

(I) Control Bus

(II) Data Bus

(III) Address Bus

▶ I only

▶ II only

▶ **III only** (Page 9)

▶ I and II only

Question No:10 (Marks: 1) - Please choose one

The basic function of SCAS instruction is to

▶ **Compare** (Page 92)

▶ Scan

▶ Sort

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► Move data

Question No:11 (Marks: 1) - Please choose one

_____ register holds the address of next instruction is to be executed

- Base pointer
- Code segment
- Source index
- **Program counter** (Page 13)

Question No:12 (Marks: 1) - Please choose one

JC and JNC test the _____ flag.

- **carry** (Page 41)
- parity
- zero
- sign

Question No:13 (Marks: 1) - Please choose one

After the execution of REP instruction CX will be decremented then which of the following flags will be affected?

- CF
- OF
- DF
- **No flags will be affected** (Page 93)

Question No:14 (Marks: 1) - Please choose one

In string manipulation whenever an instruction needs a memory source, which of the following will hold the pointer to it?

- ES: DI
- ES: BP
- DS:BP
- **DS:SI** (Page 91)

Question No:15 (Marks: 1) - Please choose one

which bit sets the character "blinking" on the screen?

- 5
- 6
- **7** (Page 7)
- 8

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Question No:16 (Marks: 1) - Please choose one

If we want to divide a signed number by 2, this operation can better be accomplished by

- ▶ SHR
- ▶ **SAR**
- ▶ SHL
- ▶ SAL

(Page 52)

Question No:17 (Marks: 1) - Please choose one

After the execution of STOSB,the CX will be.....

- ▶ Incremented by 1
- ▶ Incremented by 2
- ▶ Decrement by 1
- ▶ Decrement by 2

Question No:18 (Marks: 1) - Please choose one

Each screen location corresponds to a word, the lower byte of this word contains _____

- ▶ **The character code**
- ▶ The attribute byte
- ▶ The parameters
- ▶ The dimensions

(Page 81) rep

Question No:19 (Marks: 1) - Please choose one

In a video memory, each screen location corresponds to

- ▶ One byte
- ▶ **Two bytes**
- ▶ Four bytes
- ▶ Eight bytes

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cs401 paper 02 dec,2010

Question No:1 (Marks: 1) - Please choose one

Execution of the instruction “mov word [ES : 0], 0x0741” will print

- ▶ **“A” appear on the top left of screen**
- ▶ “A” appear on the top right of screen
- ▶ “A” appear on the center of screen
- ▶ “A” appear on the bottom left of screen

(Page 81) rep

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Question No:2 (Marks: 1) - Please choose one

After the execution of "PUSH AX" statement

▶ **AX register will reside on the stack** (Page 69) rep

- ▶ A copy of AX will go on the stack
- ▶ The value of AX disappear after moving on stack
- ▶ Stack will send an acceptance message

Question No:3 (Marks: 1) - Please choose one

If D is "35" is shift to left 2 bits the new value

- ▶ 35
- ▶ 70
- ▶ 140
- ▶ 17

Question No:4 (Marks: 1) - Please choose one

When an item is pushed on the decrementing stack, the top of the stack is

▶ **First decremented and then element copied on to the stack** (Page 68) rep

- ▶ First incremented and then element copied on to the stack
- ▶ Decrement after the element copied on to the stack
- ▶ Incremented after the element copied on to the stack

Question No:5 (Marks: 1) - Please choose one

After the execution of REP instruction CX will be decremented then which of the following flags will be affected?

- ▶ CF
- ▶ OF
- ▶ DF
- ▶ **No flags will be affected** (Page 93) rep

Question No:6 (Marks: 1) - Please choose one

In a video memory, each screen location corresponds to

- ▶ One byte
- ▶ **Two bytes (Page 66)**
- ▶ Four bytes
- ▶ Eight bytes

Question No:7 (Marks: 1) - Please choose one

shifting the -15 two bit sAR

- ▶ -7
- ▶ -8
- ▶ 7
- ▶ 8

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Question No:8 (Marks: 1) - Please choose one

mov ax,5 has

- ▶ 1 operand
- ▶ **2 operand**
- ▶ 3 operand
- ▶ 4 operand

(Page 25)

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Question No: 1 (Marks: 1) - Please choose one

The physical address of the stack is obtained by

▶ **SS:SP combination**

▶ SS:SI combination

▶ **SS:SP combination**

(Page 68) rep

▶ ES:BP combination

▶ ES:SP combination

Question No: 2 (Marks: 1) - Please choose one

After the execution of instruction "RET "

▶ **SP is incremented by 2**

▶ **SP is incremented by 2**

(Page 66) rep

▶ SP is decremented by 2

▶ SP is incremented by 1

▶ SP is decremented by 1

Question No: 3 (Marks: 1) - Please choose one

The second byte in the word designated for one screen location holds

▶ **Character color on the screen**

▶ The dimensions of the screen

▶ Character position on the screen

▶ **Character color on the screen**

(Page 81) rep

▶ ASCII code of the character

Question No: 4 (Marks: 1) - Please choose one

REP will always

▶ Increment CX by 1

▶ Increment CX by 2

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- ▶ **Decrement CX by 1** (Page 92)
- ▶ Decrement CX by 2

Question No: 5 (Marks: 1) - Please choose one
The basic function of SCAS instruction is to

- ▶ **Compare** (Page 92) rep
- ▶ Scan
- ▶ Sort
- ▶ Move data

Question No: 6 (Marks: 1) - Please choose one
Index registers are used to store _____

- ▶ Data
- ▶ Intermediate result
- ▶ **Address** (Page 16)
- ▶ Both data and addresses

Question No: 7 (Marks: 1) - Please choose one
The bits of the _____ work independently and individually

- ▶ index register
- ▶ base register
- ▶ **flags register** (Page 12)
- ▶ accumulator

Question No: 8 (Marks: 1) - Please choose one
To convert any digit to its ASCII representation

- ▶ **Add 0x30 in the digit** (Page 80) rep
- ▶ Subtract 0x30 from the digit
- ▶ Add 0x61 in the digit
- ▶ Subtract 0x61 from the digit

Question No: 9 (Marks: 1) - Please choose one
When a 32 bit number is divided by a 16 bit number, the quotient is of

- ▶ 32 bits
- ▶ **16 bits** (Page 85)
- ▶ 8 bits
- ▶ 4 bits

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Question No: 10 (Marks: 1) - Please choose one

When a 16 bit number is divided by an 8 bit number, the quotient will be in

- ▶ AX
- ▶ **AL** (Page 85) rep
- ▶ AH
- ▶ DX

Question No: 11 (Marks: 1) - Please choose one

Which mathematical operation is dominant during the execution of SCAS instruction

- ▶ Division
- ▶ Multiplication
- ▶ Addition
- ▶ **Subtraction** (Page 92)

Question No: 12 (Marks: 1) - Please choose one

If AX contains decimal -2 and BX contains decimal 2 then after the execution of instructions:

CMP AX, BX

JA label

- ▶ **Jump will be taken**
- ▶ **Zero flag will set**
- ▶ ZF will contain value -4
- ▶ Jump will not be taken

Question No: 13 (Marks: 1) - Please choose one

The execution of the instruction “mov word [ES : 160], 0x1230” will print a character “0” on the screen at

- ▶ Second column of first row
- ▶ **First column of second row** (Page 81)
- ▶ Second column of second row
- ▶ First column of third row

Question No: 14 (Marks: 1) - Please choose one

If the direction of the processing of a string is from higher addresses towards lower addresses then

- ▶ ZF is cleared
- ▶ **DF is cleared** (Page 91)
- ▶ ZF is set
- ▶ DF is set

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Question No: 15 (Marks: 1) - Please choose one

The instruction ADC has _____ Operand(s)

- ▶ 0
- ▶ 1
- ▶ 2
- ▶ 3

(Page 56)

Question No: 16 (Marks: 1) - Please choose one

Which bit of the attributes byte represents the red component of background color ?

- ▶ 3
- ▶ 4
- ▶ 5
- ▶ 6

(Page 81)

MIDTERM EXAMINATION Spring 2010

Question No: 1 (Marks: 1) - Please choose one

Suppose AL contains 5 decimal then after two left shifts produces the value as

- ▶ 5
- ▶ 10
- ▶ 15
- ▶ 20

Question No: 2 (Marks: 1) - Please choose one

In STOS instruction, the implied source will always be in

- ▶ AL or AX registers (Page 92) rep
- ▶ DL or DX registers
- ▶ BL or BX registers
- ▶ CL or CX registers

Question No: 3 (Marks: 1) - Please choose one

After the execution of STOSW the CX will be

- ▶ Decmented by 1

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- ▶ **Decrement by 2** (Page 92) rep
- ▶ Incremented by 1
- ▶ Incremented by 2

Question No: 4 (Marks: 1) - Please choose one

The basic function of SCAS instruction is to

- ▶ **Compare** (Page 92) rep
- ▶ Scan
- ▶ Sort
- ▶ Move data

Question No: 5 (Marks: 1) - Please choose one

Which is the unidirectional bus ?

- (I) Control Bus
- (II) Data Bus
- (III) Address Bus

- ▶ I only
- ▶ II only
- ▶ **III only** (Page 9) rep
- ▶ I and II only

Question No: 6 (Marks: 1) - Please choose one

The operation of CMP is to

- ▶ **Subtract Source from Destination** (Page 39)
- ▶ Subtract Destination to from Source
- ▶ Add 1 to the Destination
- ▶ Add Source and Destination

Question No: 7 (Marks: 1) - Please choose one

The registers IP, SP, BP, SI, DI, and BX all can contain a _____offset.

- ▶ 8-bit
- ▶ **16-bit** (Page 21)
- ▶ 32-bit
- ▶ 64-bit

Question No: 8 (Marks: 1) - Please choose one

In assembly the CX register is used normally as a _____register.

- ▶ source
- ▶ **counter** (Page 92)
- ▶ index
- ▶ pointer

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Question No: 9 (Marks: 1) - Please choose one

All the addressing mechanisms in iAPX88 return a number called _____ *address*.

- ▶ **effective** (Page 33)
- ▶ faulty
- ▶ indirect
- ▶ direct

Question No: 10 (Marks: 1) - Please choose one

Which bit of the attributes byte represents the blue component of foreground color

- ▶ 3
- ▶ 2
- ▶ 1
- ▶ **0** (Page 81)

Question No: 11 (Marks: 1) - Please choose one

When a 32 bit number is divided by a 16 bit number, the quotient will be stored in

- ▶ **AX** (Page 85)
- ▶ BX
- ▶ CX
- ▶ DX

Question No: 12 (Marks: 1) - Please choose one

“mov byte [num1], 5” is _____ instruction.

- ▶ **legal** (Page 30) rep
- ▶ illegal
- ▶ stack based
- ▶ memory indirect

Question No: 13 (Marks: 1) - Please choose one

Which of the following options contain the set of instructions to open a window to the video memory?

▶ mov AX, 0xb008
mov ES, AX

▶ **mov AX, 0xb800**
mov ES, AX (Page 81) rep

▶ mov AX, 0x8b00
mov ES, AX

▶ mov AX, 0x800b
mov ES, AX

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Question No: 14 (Marks: 1) - Please choose one

The execution of the instruction “mov word [ES : 0], 0x0741” will print character “A” on screen, color of the character will be

- ▶ Black
- ▶ **White (Page 81) rep**
- ▶ Red
- ▶ Blue

Question No: 15 (Marks: 1) - Please choose one

Which of the following flags will be affected by MOVSW?

- ▶ DF
- ▶ PF
- ▶ ZF
- ▶ **No effect on flags**

Question No: 16 (Marks: 1) - Please choose one

Which bit of the attributes byte represents the blue component of background color ?

- ▶ 3
- ▶ **4 (Page 81)**
- ▶ 5
- ▶ 6

**MIDTERM EXAMINATION
Spring 2009**

Question No: 1 (Marks: 1) - Please choose one

To transfer control back the RET instruction take

- ▶ 1 argument
- ▶ 1 argument
- ▶ **3 arguments (Page 72) rep**
- ▶ No arguments

Question No: 2 (Marks: 1) - Please choose one

In STOSB instruction SI is decremented or incremented by

- ▶ 4
- ▶ 1
- ▶ 2
- ▶ 3

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Question No: 3 (Marks: 1) - Please choose one

CMPS instruction subtracts the source location to the destination location.

Destination location always lies in

- ▶ **DS:SI** (Page 93)
- ▶ DS:DI
- ▶ ES:SI
- ▶ ES:DI

Question No: 4 (Marks: 1) - Please choose one

Regarding assembler, which statement is true:

- ▶ **Assembler converts mnemonics to the corresponding OPCODE** (Page 13)
- ▶ Assembler converts OPCODE to the corresponding mnemonics
- ▶ Assembler executes the assembly code all at once
- ▶ Assembler executes the assembly code step by step

Question No: 5 (Marks: 1) - Please choose one

If “BB” is the OPCODE of the instruction which states to “move a constant value to AX register”, the hexadecimal representation (Using little Endian notation) of the instruction “Mov AX,336” (“150” in hexadecimal number system) will be:

- ▶ 0xBB0150
- ▶ 0x5001BB
- ▶ 0x01BB50
- ▶ 0xBB5001

Question No: 6 (Marks: 1) - Please choose one

In the instruction MOV AX, 5 the number of operands are

- ▶ 1
- ▶ **2** (Page 25) rep
- ▶ 3
- ▶ 4

Question No: 7 (Marks: 1) - Please choose one

The maximum parameters a subroutine can receive (with the help of registers) are

- ▶ 6
- ▶ **7** (Page 72)
- ▶ 8
- ▶ 9

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Question No: 8 (Marks: 1) - Please choose one

In assembly the CX register is used normally as a _____ register.

- ▶ source
- ▶ **counter**
- ▶ index
- ▶ pointer

(Page 92) rep

Question No: 9 (Marks: 1) - Please choose one

All the addressing mechanisms in iAPX88 return a number called _____ address.

- ▶ **effective**
- ▶ faulty
- ▶ indirect
- ▶ direct

(Page 33) rep

Question No: 10 (Marks: 1) - Please choose one

When a 16 bit number is divided by an 8 bit number, the dividend will be in

- ▶ **AX**
- ▶ BX
- ▶ CX
- ▶ DX

(Page 85)

Question No: 11 (Marks: 1) - Please choose one

in Left-Shift-Operation the left most bit _____

- ▶ will drop
- ▶ **will go into CF**
- ▶ Will come to the right most
- ▶ will be always 1

(Page 52)

Question No: 12 (Marks: 1) - Please choose one

Suppose the decimal number "35" after shifting its binary two bits to left, the new value becomes _____

- ▶ 35
- ▶ 70
- ▶ 140
- ▶ 17

Question No: 13 (Marks: 1) - Please choose one

When divide overflow occurs processor will be interrupted this type of interrupt is called

- ▶ Hardware interrupt
- ▶ Software interrupt
- ▶ Processor exception
- ▶ Logical interrupts

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Question No: 14 (Marks: 1) - Please choose one

Which mathematical operation is dominant during the execution of SCAS instruction

- ▶ Division
- ▶ Multiplication
- ▶ Addition

▶ **Subtraction** (Page 92) rep

Question No: 15 (Marks: 1) - Please choose one

After the execution of REP instruction CX will be decremented then which of the following flags will be affected?

- ▶ CF
- ▶ OF
- ▶ DF

▶ **No flags will be affected** (Page 93) rep

Question No: 16 (Marks: 1) - Please choose one

_____ is one of the reasons due to which string instructions are used in 8088

- ▶ Efficiency and accuracy
- ▶ Reduction in code size and accuracy
- ▶ **Reduction in code size and speed**
- ▶ Reduction in code size and efficiency

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