



**CS401 Assembly Language**  
**Solved MCQS**  
**From Midterm Papers**

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MC100401285

*Moaaaz.pk@gmail.com*

*MC100401285@gmail.com*

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

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**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 ,JA label

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

**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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

**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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

**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

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

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
  - Decrementd CX by 1** (Page 92)
  - Decrementd 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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@Gmail.com](mailto:mc100401285@Gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

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

- legal (Page 30)
- illegal
- 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
- DS:SI (Page 92)

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 (00100011 = 35 , 10001100=140)
- 17

16. While using STOSB, 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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

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

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**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** [Click here for detail](#)

- ▶ 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 Spring 2010 CS401 Assembly Language

**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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari



**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
- ▶ **Decremented by 1** [Click here for detail](#)
- ▶ Decrementd 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** (Page 12)
- ▶ 64 bit

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

To transfer control back the RET instruction take

- ▶ 1 argument
- ▶ 1 argument
- ▶ **3 arguments** (Page 72) (Not sure)
- ▶ No arguments

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

**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**

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

- ▶ 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 (Page 52)**

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**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
- ▶ SP is decremented by 2

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

▶ **SP is incremented by 4 (Page 66)**

▶ 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

▶ Divide logical error

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

▶ **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** (Page 80)
- ▶ 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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

## MIDTERM Fall 2011

### CS401 Assembly Language

**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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

**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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari



- ▶ Sort
- ▶ 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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

**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 (Page 52)
- ▶ SHL
- ▶ SAL

**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 (Page 92)
- ▶ 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 (Page 81) rep
- ▶ The attribute byte
- ▶ The parameters
- ▶ The dimensions

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

In a video memory, each screen location corresponds to

- ▶ One byte
- ▶ Two bytes (Page 86)
- ▶ Four bytes
- ▶ Eight bytes

## MIDTERM EXAMINATION Spring 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 (Page 81) rep
- ▶ “A” appear on the top right of screen
- ▶ “A” appear on the center of screen
- ▶ “A” appear on the bottom left of screen

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

**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

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

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

mov ax,5 has

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

(Page 25)

## **MIDTERM EXAMINATION Spring 2010**

**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

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

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

REP will always

- ▶ Increment CX by 1
- ▶ Increment CX by 2
- ▶ **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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

**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

**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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

**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
- ▶ ZF is set

▶ **DF is set** (Page 91)

**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

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

- ▶ 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

- ▶ Decremented by 1
- ▶ **Decremented 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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari



**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

**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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

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

**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

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

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

In STOSB instruction SI is decremented or incremented by

- ▶ 4
- ▶ **1 (Page 92) SI and DI both are Index registers**
- ▶ 2
- ▶ 3

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

**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 (Page 19)**

**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

**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

▶ 9

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

In assembly the CX register is used normally as a \_\_\_\_\_ register.

▶ source

▶ **counter** (Page 92) rep

▶ index

▶ pointer

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

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

▶ **effective** (Page 33) rep

▶ faulty

▶ indirect

▶ direct

**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** (Page 85)

▶ BX

▶ CX

▶ DX

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

in Left-Shift-Operation the left most bit \_\_\_\_\_

▶ will drop

▶ **will go into CF** (Page 52)

▶ Will come to the right most

▶ will be always 1

**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

Muhammad Moaaz Siddiq MCS (3rd)

[mc100401285@gmail.com](mailto:mc100401285@gmail.com)

Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari

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

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

▶ **Hardware interrupt**      [Click here for detail](#)

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

**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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**Muhammad Moaaz Siddiq MCS (3rd)**

**[mc100401285@gmail.com](mailto:mc100401285@gmail.com)**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**