***Final Exam***

***Question 1:*** Choose the correct answer from the following

1. What are DWORD, WORD and BYTE in computer language.

A) Byte = 8 bits, Word= 4 Bytes, Dword= 8 Bytes

B) Byte = 8 bits, Word=2 Bytes, Dword=4 Bytes

C) Byte = 8 bits, Word=12 bits, Dword=32 Bits

D) Byte = 8 bits, Word=24 bits, Dword=40 Bits

1. What is the operator used to make 1's One's compliment on binary number

A) AND Operator

B) OR operator

C) NOT Operator

D) XOR

1. What is the result of **0110 AND 1100**

A) 1000

B) 0100

C) 0001

D) 1010

1. The statment **atod** string is a

A) macro with a single operand

B) procedure with a single operand.

C) instruction with a single operand.

D) none of them

1. What is the result of **0110 OR 1100**

A) 1110

B) 1100

C) 1000

D) 1010

1. when implement logical shift, SF and ZF will not change
2. true
3. false
4. What is the result **0110 XOR 1000**

A) 1000

B) 1110

C) 0011

D) 0001

1. What is the result of **shl** two positions on **00011000**

A) 01100000

B) 11000000

C) 00000110

D) 00000011

1. What is the result of **shr** two positions on **00110000**

A) 11000000

B) 00001100

C) 01100000

D) 11001111

1. You need a directive to allocate stack
2. true
3. false
4. What is the result of the following additions of doubleword size numbers **76+3A**

A) BF

B) CB

C) B0

D) FB

1. If the content of the EBX register is 22 33 44 55 what will be the content of this register after executing the following instruction:

push EBX

A) 55 44 33 22

B) 00 55 44 33

C) 22 33 44 55

D) none of them

1. What is the minimum and maximum values in Octal Number System

A) 1 to 8

B) 0 to 7

C) 2 to 9

D) None of them

1. Choose correct statement about Logical Left Shift Operator

A) Left shift operator shifts individual bits on the left side

B) Last bit shifted off saved in CF

C) Zeroes are filled on the right side

D) All the above

1. The easiest way to implement a for loop in 80x86 assembly program is using --------- instruction

A) lea

B) loop

C) for

D) none of them

1. The instruction that returns the first address in array in 80x86 is:

A) lea

B) loop

C) for

D) none of them

1. Choose correct statement about Arithmetic Left Shift Operator

A) Left shift operator shifts individual bits on the left side

B) Last bit shifted off saved in CF

C) Zeroes are filled on the right side

D) All the above

1. Choose a correct statement about Logical Right Shift Operator

A) Right shift operator shift individual bits on to the right side.

B) When shifting bits right side, overflow bits on the right are ignored or truncated.

C) Zeroes are filled on the left side.

D) All the above

1. If the content of the ECX register is 00 00 BF 7A what will be the content of this register after executing the following instruction:

sal ecx, 2

A) FF 02 FD E8

B) 00 02 FD E8

C) FF F2 FD E8

D) none of them

1. Which is a Unary Operand Operator below

A) AND

B) OR

C) XOR

D) NOT

1. What is the operator used to **mask** a particular bit

A) AND Operator

B) XOR Operator

C) OR operator

D) none of them

1. Logical Left Shift operation is equivalent to

A) Division by 2

B) Multiplying by 2

C) Adding 2

D) Subtracting 2

1. Logical Right Shift operation is equivalent to

A) Multiplying by 2

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C) Adding 2

D) Subtracting 2

1. Most access to stack is indirect
2. true
3. false
4. Which of the following is an allowable label (name)?

A) much

B) add

C) mov

D) none of them

1. What is the result of the following additions of word size numbers **F4-25**

A) BF

B) CF

C) AF

D) none of them

1. The Hexadecimal Representation for the following Binary number **10101101**

A) AB

B) DA

C) AD

D) none of them

1. The last statement of the source program should be \_\_\_\_\_\_\_
2. Stop
3. Return
4. OP
5. End
6. A machine language instruction format consists of
7. Operand field
8. Operation code field
9. Operation code field & operand field
10. none of them
11. What is the content of Stack Pointer
12. Address of the current instruction
13. Address of the next instruction
14. Address of the top element of the stack
15. None of these
16. In a PC using an Intel 80x86 microprocessor, the number of bits in the EBX register is

A) 16

B) 32

C) 8

D) none of them

1. The Hexadecimal Representation for the following Binary number **10101101**

A) AB

B) DA

C) AD

D) none of them

1. Which dir**e**ctive tells the assembler to recognize 80x86 instructions that use 32-bit operands

A) .STACK 4096

B) .586

C) .MODEL FLAT

D) none of them

1. The direct and easiest way to swap two values in assembly language program is using the instruction

A) mov

B) xchg

C) jmp

D) none of them

1. To get user input in assembly language program we use
2. Input
3. cin
4. Read
5. none of them
6. What is the result of the following additions of those two binary numbers **0101+0111**

A) 1100

B) 1011

C) 0111

D) none of them

1. What is the result of the following subtraction of word size numbers **0111-0101**

A) 0010

B) 0011

C) 0001

D) none of them

1. What is the name of the register in which 80x86 flags are stored?

A) EDX

B) EAX

C) EFLAGS

D) none of them

1. In a PC using an Intel 80x86 microprocessor, the number of bits in the **EBX** register is \_\_\_\_\_

A) 8

B) 16

C) 32

D) none of them

1. What the Binary Representation for the Decimal number 53

A) 110100

B) 110101

C) 110110

D) none of them

1. If the content of the **EAX** register is 22 33 44 55 and **EBX** register is 00 63 FB 60, what will be the content of the EAX after executing the following instruction

xchg EAX, EBX

A) 00 63 FB 60

B) 22 33 44 55

C) 00 63 FB 64

D) none of them

1. What will be the content of the **EBX** register after executing the instruction in the previous question (38)

A) 00 63 FB 60

B) 00 63 FB 5C

C) 00 63 FB 64

D) none of them

1. \_\_\_\_\_ directive specifies the end of execution of a program.
2. End
3. Return
4. Stop
5. Terminate
6. Suppose you want to calculate ***ebx mod 8***
7. and ebx, 0fffffff0h
8. and ebx, 00000007h
9. and ebx, 00000008h
10. none of them
11. The ***cdecl***is
12. a protocol provides one standard implementation scheme in the 32-bit environment
13. a program provides one standard implementation scheme in the 32-bit environment
14. a protocol provides one standard implementation scheme in the 64-bit environment
15. none of them
16. The action of pushing arguments on stack in right-to-left order happen in the
17. procedure code
18. calling program code
19. A and B
20. none of them
21. We can use --------- to flip bits
22. not
23. and
24. xor
25. none of them
26. The instruction **pop 100** is correct
27. true B) false
28. Reference parameters are used to
29. to send a small argument to a procedure
30. to send a large argument to a procedure
31. both of them
32. none of them
33. The result of the instructions

**mov ax, 0e275h**

**xor ax, 0a79dh**

1. 4aa2
2. 4ba2
3. Aa42
4. none of them
5. The instruction **push eax**
6. copy the content of the element pointed by esp to eax
7. copy the content of the element pointed by eax to esp
8. store the content of the element pointed by eax
9. none of them
10. The ESP content cannot be changed
11. true B) false
12. **sar** same as **sal**
13. true B) false
14. Which of the following assembler directives are used to define a Procedure in the 8086 Microprocessor
15. PROCEDURE and ENDP
16. STARTP and ENDP
17. PROC and ENDPROC
18. None of the above
19. atod is a
20. Macro
21. Procedure
22. Instruction
23. none of them
24. When you implement the instructions

**mov ax, 0ac54h**

**not ax**

The value of SF & ZF will not changed

1. true
2. false
3. The result of the instructions

**mov ax, 0e275h**

**ror ax, 1**

1. d4ae
2. d4ba
3. ea42
4. none of them
5. We can use --------- to set bits
6. or
7. and
8. xor
9. none of them
10. In the procedure body, parameters are located relative to the address in
11. ESP
12. EBP
13. EIS
14. none of them
15. Sending Parameter to the procedure can be done using
16. Stack
17. Registers
18. Both of them
19. none of them

***Question 2:***

Write an assembly program that reads a number and an array of 10 numbers then check how many times the number occurs in the array

***G.O.O.D L.U.C.K***