

# **CS401 Quiz 1 2021**

## **ORANGE MONKEY TEAM**

**Opening date 30 and Due date 31**

1. The programmable interval Timer (PTI) has input frequency of \_\_\_\_\_.

1.19318MHZ ..confirm

2. Which of the following IRQs is used for sound card or network card or the modem?

IRQ 5....confirm

3. Which of the following IRQ is used by the floppy disk drive?

IRQ 6....confrim

4. Which of the following IRQ is used by the parallel port

IRQ 7....confirm

5. Which of the following IRQ is derived by the keyboard when generates an interrupts when a key is passed or released

IRQ 1.....confirm

6. Which of the following IRQ is the cascading interrupt connected to the output of the second 8451 in the machine.

IRQ 2.....confirm

7. Which of the following IRQ is connected to serial port COM 2

IRQ 3.....confirm

8. Which of the following IRQ is connected to serial port COM 1?

IRQ 4....confirm

9. Which of the following instructions is used to read a character from the keyboard port?

in al, 0x60....confirm

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**ORANGE MONKEY TEAM**

10. Which of the following instruction is the key left shift?

`cmp al, 0x2a....confirm`

11. Which of the following instruction is no, try next comparison?

`jne nextcmp....confirm`

12. Which of the following instruction is used to point es to video memory?

`mov es, ax...confirm`

13. Which of the following instruction is used to send EOI to PIC?

`out 0x20, al.....confrim`

14. Which of the following instruction is used to point as to IVT base

`mov es, ax.....confirm`

15. Which of the following instruction is used to disable interrupts?

`Cli ....confirm`

16. Which of the following instruction is used to store offset at  $n*4$ ?

`mov word [es:9*4], kbisr....confrim`

17. Which of the following instruction is used to store segment at  $n*4+2$ ?

`mov [es:9*4+2], cs....confirm`

18. Which of the following instruction is used to enable interrupts?

`Sti.....conftim`

19. All register and stack of a program are saved in\_\_\_\_\_.

`Multitasking...confirm from net`

20. \_\_\_\_\_ is/are the port number(s) for parallel port

`378...confirm`

21. \_\_\_\_\_ is/are the port number(s) for keyboard

`60 to 64...confrim`

22. \_\_\_\_\_ is/are the port number(s) for PIC

20 and 21...confirm

23. Which of the following is the ACK pin in DB-25 connector?

10....confirm

24. IBM AT has \_\_ Programmable Interrupt Controllers(PIC)

2.....confirm

25. Which of the following interrupts is of highest priority?

Timer interrupt.....confirm

24. Which of the following is the source register in OUT instruction?

AL or AX.....confirm

25. At the end of servicing an interrupt \_\_\_\_\_ signal is used to inform the Programmable Interrupt Controller (PIC) about it.

EOI.....confirm

26. The space where all registers of a task are stored is called \_\_\_\_\_

Process Control Block(PCB)

27. INT 08 that is saving and restoring the registers is called \_\_\_\_\_ and the whole event is called a \_\_\_\_\_

Schedule, context switch.....confirm

28. \_\_\_\_\_ is used for exporting keyboard service.

INT 16...confirm

29. \_\_\_\_\_ is used for exporting video services accessible

INT 10...confirm

30. \_\_\_\_\_ is used for parallel port services and similarly others through different interrupts.

INT 17...confirm

31. \_\_\_\_\_ just like a pin hole camera

INT 21...confirm

32. Which of the following are the data pins used to take data from the processor to the devices connected through parallel port

2 to 9....confrim

33. Which of the following the ACK, is normally used by the printer to acknowledge the receipt of data and show the willingness to receive more data

10.... confrim

34. Which of the following are ground and must be connected to the external circuit ground to provide.

18 to 25....confrim

35. Which of the following stands for TSR?

Terminate and stay resident

36. The first parallel port LPT1 has ports designated from \_ to \_\_\_\_\_.

378, 37A..confrim

37. In intel 8088, there are a total of \_\_\_\_\_ possible interrupt vectors in an interrupt Vector Table.

256....confrim

38. A parallel port has \_\_\_\_\_ views

2.....confrim

39. The parallel port connector is called\_\_\_\_\_.

DB-25....confrim

40. Which of the following is the highest priority interrupt?

INT 8.....confrim

41. iret returns on the basis of \_\_\_\_\_ and \_\_\_\_\_

CS , IP.....confrim

42. When two devices in a system want to use the same interrupt Request (IRQ) line, is referred as IRQ\_\_\_\_\_.

Conflict.....confirm

43. Which of the following interrupt request(IRQ) is derived by a timer device.

IRQ 0.....confrim

44. Which of the following interrupt request(IRQ) is derived by a keyboard.

IRQ 1....confrim

45. Which of the following interrupt request(IRQ) is connected to serial port COM 2.

IRQ 3...confirm

46. Changing and restoring the state of Central Processing Unit (CPU) is called

Context switching...confirm from net

47. Which of the following is used for exporting parallel port services

INT 17.....confirm

48. The parallel port connector is called \_\_\_\_\_.

DB-25....confrim

49. Port \_\_\_\_ is used to send an End Of interrupt(EOI) signal to the programmable Interrupt Controller(PIC) after an interrupt has ended?

0x20...confrim

50. Which of the following is the destination register in IN instruction?

AL or AX.....confrim

51. \_\_\_\_\_ is used in debugging along with the trap flag.

INT 1.....confirm

52. An End of interrupt (EOI) signal is sent by the

Programmable Interrupt controller.....confirm

53. Each of the bits of port \_\_\_\_\_ corresponds to one of the interrupt request (IRQ) lines  
21.....confirm

54. The thread registration code initializes the Process Control Block (PCB) and adds it to the linked list. The \_\_\_\_\_ then gives it a turn.  
Scheduler.....confirm

55. Which of the following is BIOS interrupt providing keyboard services?  
Int 0x16...confirm

56. DOS has a single entry point to access all of its services through\_\_\_\_\_.  
INT 21.....confirm

57. The output of programmable interval timer (PIT) is connected to the \_\_\_ line of programmable interrupt controller (PIC).  
IRQ 0....confirm

58. Which of the following flags can be used in mathematical operations?  
Carry flag....confirm

59. Programmable Interrupt Controller (PIC) has \_\_\_\_\_ input signal(s) and \_\_\_\_\_ output signal(s).  
Eight, one.....confirm

60. Which of the following pins of DB-25 connector are ground?  
18-25.....confirm

61. IF the \_\_\_\_\_ flag is set, then after every instruction, a type 1 interrupt will be generated  
Automatically  
Trap.....confirm

62. Which of the following interrupts plays the most significant part during single step debugging of a program?  
INT 1....confirm

63. Which of the following flags is cleared with the help of stack?

Interrupt flag

64. Programmable interrupt controller has \_\_\_\_\_ ports 20 and 21.

2.....confrim

65. PCB stands for \_\_\_\_\_.

Process Control Block.....confirm

66. Which of the following is correct regarding the input frequency of Programmable interval Timer (PIT)?

It is fixed.....confirm

67. Which of the following is the order of pushing the contents on stack during the execution of INT instruction?

FLAGS CS and then IP....confirm

68. \_\_\_\_\_ is a special type of interrupt that returns to the same instruction instead of the next instruction

Divide overflow interrupt....confrim

69. Which of the following instruction is used to disable all interrupts during the execution of a program?

cli...confirm

70. The offset address of an interrupt service routine "n" at \_\_\_\_\_.

nx4.....confirm

71. The offset address of the segment will be at\_\_\_\_\_.

nx4+2.....confirm

72. In intel 8088 the interrupt vector table occupies \_\_\_\_\_ of memory

4 bytes

73. \_\_\_\_\_ is a special type of interrupt that returns to the same instruction instead of the next instruction.

Divide overflow interrupt.....confirm

74. Which of the following interrupts is used for saving and restoring the register?

INT 08.....confirm

75. Which of the following instruction is used to return from an interrupt service routine?

IRET.....confirm

76. Which of the following is the order of pushing the contents on stack during the execution of IRET pops instruction?

IP, CS, and then FLAGS.....confirm

77. Which of the following is the priority of interrupt Request (IRQ) 0?

Highest.....confirm

78. The number of \_\_\_\_\_ in a cell is called the cell width

Bits....confirm

79. iAPXBB architecture consists of

14 register

80. Synchronization between the processor and the memory for read and write operations is done by the \_\_\_\_\_.

Control bus

90. \_\_\_\_\_ transfer the word at the top of the stack (pointed to by SP) to the destination operand and increments SP by two.

POP....confirm

91. In extended multiplication, we store the multiplicand in \_\_\_\_\_ bits, and the result is stored in \_\_\_\_\_ bits

32, 32.....confirm

92. Suppose AX=5, BX=5, DX=0, CF=1, ZF=1, What will be the final value in AX register after the execution of ADC, AX, BX?

10....confirm

93. Shift logical left (SHL) moves of the bits one position to the \_\_\_\_\_ and inserts to zero from the \_\_\_\_\_.

Right, left...confirm

94. In MUL instruction, if the source operand is a byte, then it is multiplied with \_\_\_\_\_ register.

Al.....confirm

95. When the operand of DIV instruction is in 16 bits, then the implied dividend will be in

DX:AX.....confirm

96. We can convert a digit into its ASCII representation by adding \_\_\_\_\_ to it.

0x30.....confirm

97. Shifting the integer 5 left by 1 bit results in

10....confirm from net

98. Intel 8085 can access up to \_\_\_\_\_ of memory, whereas intel 8088 can access up to \_\_\_\_\_ of memory

16 bits, 32 bits

99. The ordering of a program's instruction is ensured by the \_\_\_\_\_ register

Program counter....confirm

100. When the RET instruction is executed, it recovers the value of the \_\_\_\_\_ from the stack.

Instruction pointer.....confrim

101. If AND operation is performed between AX and BX, then how many AND operations will be performed in total?

16.....confirm

102. Keeping in view the downward compatibility between the two systems, the codes written for the intel 8088 are \_\_\_\_\_ on the intel 386 processor.

Valid...confirm

103. SP is associated (by default) with \_\_\_\_\_.

SS....confrim

104. IP is associated (by default) with \_\_\_\_\_.

CS....confirm

105. ASCII stands for \_\_\_\_\_.

American Standard Code for information interchange

106. \_\_\_\_\_ is used for permanent diversion.

Jump.....confrim

107. Which of the following uses data segment by default?

Base pointer....confirm

108. Which of the following is the number of operands for ADC (ADD with carry) instruction

3

109. Which of the following addressing scheme has been used in the instruction MOV[BX],AX?

Base register indirect.....confrom from net

110. Suppose AX=5, BX=5, DX=0, CF=1, ZF=1 and AF=1. What will be the final value in AX register after the execution of ADC AX, BX?

10... not sure

111. Suppose BX=0x0120, CS=0x1000, and the memory under consideration is [CX:BX+0x0880]. Which of the following will be the physical address?

11A00

112. \_\_\_\_\_ transfer the word at the top of the stack (pointed to by SP) to the destination operand, and increment SP by two

**POP**

113. In extended multiplication, we store the multiplied in \_\_\_\_\_ bits, and the result is stored in \_\_\_\_\_ bits.

**32, 32.....confirm**

114. The number of \_\_\_ in a cell is called the cell width?

**Bits**

115. iAPx88 architecture consist of

**14 registers**

116. Synchronization between the processor and the memory for read and write operation is done by the \_\_\_\_\_.

**Control bus.....confirm**

117. What does the PUSH operation do

**It copies the operand on the stack.....confirm**

118. Intel 8085 can access up to \_ of memory, whereas intel 8088 can access up to \_\_\_\_\_ of memory.

**16 bits, 32 bits...confirm**

119. The basic function of register is to hold \_\_\_\_\_.

**Operand...confirm**

120. Which of the following bus is used to inform the memory that whether process wants to read data or write data?

**Control bus.....confirm**

121. In which of the following addressing, both register are not constant?

Base + index

122. `mov [1234], ax` is an example of \_\_\_\_\_ addressing.

Direct....confirm

123. What the following piece of code does?

`Shl word [multiplicand], 1`

`Rcl word[multiplicand +2], 1`

Extended shift left.....confirm

124. The correct instruction to subtract with borrow is \_\_\_\_\_

SBB...confirm

125. The correct instruction to subtract without borrow is \_\_\_\_\_.

SUB...confirm

126. Which of the following string instructions is generally used in a loop instead of REP prefix?

LODs...confirm

127. With the execution of Call instruction, the value of \_\_\_\_\_ is decremented by 2

SP...confirm

128. iAPX88 stands for \_\_\_\_\_.

Intel Advanced Processor Extension 88

129. In far jump \_\_\_\_.

Both offset and segment are given

130. A value of 0500 is stored in memory. If we transfer this value to a general-purpose register, then it will be shown as

0005....confirm

131. Which of the following operations is used to set any specific bit in a binary number?

AND....confirm from net

132. The multiplier is stored in \_\_\_\_\_ bits in Extended Multiplication

32...confirm

133. After the execution of Shift Arithmetic Right instruction, the most significant bit

\_\_\_\_\_.

Is replaced by a 1

134. In multiplication algorithm, we take the first digit of the multiplier and multiply it with the \_\_\_\_\_.

Multiplicand....confirm

135. During program execution, if any change occurs in AH or AL is also reflected in

\_\_\_\_\_.

AX.....confrim

136. Which of the following jump does not depend on flogs register?

JCXZ...confirm

137. RET instruction takes \_\_\_\_\_ argument(s)

0 ...confirm

138. Shift logical Right(SHR) moves all the bits one position to the \_\_\_\_\_ and inserts a zero from the \_\_\_\_\_.

Left, right....confrim

139. All mathematical and logical operations are performed on the \_\_\_\_\_.

Accumulator....confrim

140. STI stands for?

Set the interrupt flag

141. What is the purpose of MOV AX, 0xFFFF?

Mov AX into 0xFFFF.....confirm

142. An important role of the stack is in the creation of \_\_\_\_\_ variables that are only needed while the subroutine is in execution and not afterwards.

Local...confirm

143. \_\_\_\_\_ decrements SP (the stack pointer) by two, and then transfers a word from the source operation to the top of the stack

PUSH

144. Which of the following cannot be pushed on the stack?

1 byte...confirm

145. The maximum parameters a subroutine can receive are \_\_\_\_\_ when all the general purpose registers are used

7.....confirm

146. The \_\_\_\_\_ flag has a special role in debugging.

Trap...confirm

147. In the instruction mov word [es:0] 0x1230, 12 refers to \_\_\_\_\_ color on \_\_\_\_\_ background

Green, blue.....confirm

148. In the instruction mov word [es:0] 0x0741, 12 refers to \_\_\_\_\_ color on \_\_\_\_\_ background

White, black....confirm

149. In the instruction mov word [es:0] 0xb800, 12 refers to \_\_\_\_\_ color on \_\_\_\_\_ background

White,black...confirm

150. Which of the following is a program control instruction?

Jne 0534....confirm

151. Which of the following instruction allows memory to memory movement of data?

MOVS....confrim

152. \_\_\_\_\_ can also be used as a masking operation to invert selective bits

XOR...confirm

153. Code size reduction and improvement in speed were the two reasons for introducing block processing instructions in the \_\_\_\_\_ processor

8088....confrim

154. In assembly language, the first executable instruction of the program should be placed at the offset.

0x0100....confrim

155. BH register is a (an) \_\_\_\_\_ bit register.

8...confirm

156. Which of the following instructions allows code reusability in 8088?

Call...confrim

157. In ADC instruction, there are \_\_\_\_\_.

Two operands and the CF....confriim

1. Which of the following gives the more logical view of the storage medium?

DOS

2. An 8 x 16 font is stored in \_\_\_\_\_ bytes.

16

3. In DOS input buffer, the number of characters actually read on return is stored in \_\_\_\_\_ byte.

2nd

4. Which of the following interrupts is Non maskable interrupt?

INT 2

5. In STOSW instruction, when DF is clear, DI is \_\_\_\_\_

Incremented by 2

6. Which bit of the attributes byte represents the red component of foreground color?

2

7. SP is associated with \_\_\_\_\_, by default.

SS

8. When an element is pushed on the stack SP is decremented by \_\_\_\_\_.

4

9. The other directive is "define word" or "dw" with the same syntax as "db" but reserving a whole word of \_\_\_\_\_ bits instead of a byte.

16

10. The 8088 processor divides interrupts into \_\_\_\_\_ classes.

Four

11. Physical memory address is of

32 Bits

12. Which of the following string instruction is generally used in a loop instead of REP prefix?

LODS

13. "mov [bp], al" moves the one byte contents of the AL register to the address contained in BP register in the current \_\_\_\_\_.

Data Segment

14. Number of operands of ADC (add with carry) register are:

3

15. There are \_\_\_\_\_ registers in iAPX88 architecture that can hold address of data.

4

16. In branching mechanism, the assembler

Finds the Branch offset and replaces the Branch target with it

17. The purpose of MOVS instruction is:

Move register to register

18. ASCII table is the contiguous arrangement of the uppercase alphabets (41-5A), the lowercase alphabets (61-7A), and the numbers \_\_\_\_\_.

31-41

19. In a comparison, if the both operands are same. The result of subtraction will be zero and the zero flag will be \_\_\_\_\_.

Set

20. Which of the following is a non-destructive AND operation?

OR

21. `mov [1234], ax` is an example of  
base+index addressing

22. `DX` plays an important role in arithmetic \_\_\_\_\_.  
multiplication

23. Which of the following Move generates error in `.com` file?

Fetal move

24. Which of the following register is used to hold address of the next instruction to be executed?

Program counter

25. \_\_\_\_\_ instruction makes the code reusable.

`CALL`

26. How many characters were defined by standard ASCII?

128

27. The top of stack is contained in \_\_\_\_\_ register.

`BP`

28. Sending the appropriate signals on the control bus to the memory is the responsibility of \_\_\_\_\_.

Processor

29. The execution of the instruction "`mov word [ES : 160], 0x1230`" will print a character on the screen at:

first column of second row

30. In \_\_\_\_\_ every bit moves one position to the right and the bit dropped from the right is inserted at the left and also copied into the carry flag?

**ROR**

31. CX register is mostly used as a  
**counter register**

32. If AX=5, BX=5, CF and ZF are set, AF and DX contains zero then after the execution of instruction "ADC AX, BX", AX will contain the value \_\_\_\_\_.

**11**

33. MOV [BX+SI+300], AX is a \_\_\_\_\_ addressing mode instruction.

**Base + Index**

34. In general, width of a memory cell cannot be greater than the width of \_\_\_\_\_.

**I/O Bus**

35. All mathematical and logical operations are performed on the \_\_\_\_\_.

**Arithmetic Logic Unit**

36. \_\_\_\_\_ is a special instruction that load a segment register and a general purpose register from a memory locations.

**CALL**

37. Group of bits processor uses to inform memory which element to read/write is collectively known as

**Control bus**

38. Which of the following operation is used to clear any specific bit in a binary number?

**AND**

39. Which part of this (00000000000 B80500) encoded instruction is an offset?

0500

40. SCAS compares a source byte or word in register AL or AX with the \_\_\_\_\_ string element addressed by ES: DI and updates the flags.

Destination

41. What does the given instruction do?  
SHR DL, 1

Shift and store the One bit in DL

42. \_\_\_\_\_ is set only when the last mathematical or logical operation produces a zero in its destination.

Zero flag

43. The extension of assembly language file is

.asm

44. Stack is a data structure that behaves in a first in last \_\_\_\_\_ manner.

Out

45. The instruction, MOV AX, 0005H belongs to the address mode of \_\_\_\_\_.

Immediate

46. This jump is taken if the last arithmetic operation produced a positive number in its destination.

JNS

47. BH register is a \_\_\_\_\_ bit register.

8

48. The jump command that does not depend on FLAG register is

**JCXZ**

49. \_\_\_\_\_ is the basic means of sorting temporary data on the stack.

**PUSH**

50. Which of the following addressing scheme has been used in the instruction MOV [BX], AX?

**Base Register Indirect**

51. \_\_\_\_\_ and \_\_\_\_\_ are taken if the last arithmetic operation produced a number in its destination that has odd parity.

**JNP, JPO**

52. In case of 32-bit processor, the size of an accumulator register will be \_\_\_\_\_ bits.

32

53. The interrupt call loads new values in \_\_\_\_\_ segment.

**CS**

54. The jump is taken if the last arithmetic operation did not changed the sign unexpectedly.

**JNO**

55. This jump is taken if the last arithmetic operation generated a carry or required a borrow. After a CMP it is taken if the unsigned destination is smaller than the unsigned source.

**JC JB JNAE**

56. This jump is taken if the last arithmetic operation did not generated a carry or required a borrow. After a CMP it is taken if the unsigned destination is larger or equal to the unsigned source.

**JNC, JNB, JAE**

57. This jump is taken if the last arithmetic operation produced a zero in its destination. After a CMP it is taken if both operands were equal.

JE ,JZ

58. This jump is taken if the last arithmetic operation did not produce a zero in its destination. After a CMP it is taken if both operands were different.

JNE ,JNZ

59. This jump is taken after a CMP if the unsigned destination is larger than the unsigned source.

JA, JNBE

60. This jump is taken after a CMP if the unsigned destination is smaller than or equal to the unsigned source.

JNA, JBE

61. This jump is taken after a CMP if the signed destination is smaller than the signed source.

JL ,JNGE

62. This jump is taken after a CMP if the signed destination is larger than or equal to the signed source.

JNL ,JGE

63. This jump is taken after a CMP if the signed destination is larger than the signed source.

JG,JNLE

64. This jump is taken after a CMP if the signed destination is smaller than or equal to the signed source.

JNG ,JLE

65. This jump is taken if the last arithmetic operation did not change the sign unexpectedly.

JNO

66. This jump is taken if the last arithmetic operation produced a negative number in its destination.

JS

67. This jump is taken if the last arithmetic operation produced a positive number in its destination.

JNS

68. This jump is taken if the last arithmetic operation produced a number in its destination that has even parity.

JP JPE

69. This jump is taken if the last arithmetic operation produced a number in its destination that has odd parity.

JNP JPO

70. This jump is taken if the CX register is zero.

JCXZ

71. The jump is taken if the last arithmetic operation changed the sign unexpectedly.

JO....confirm

72. All the addressing modes return the number after calculation, this number is known as \_\_\_\_\_ ?

Effective Address

73. \_\_\_\_\_ is a temporary storage places inside the processor.

Register

74. There are just \_\_\_\_\_ block processing instructions in 8088.

5

75. MUL (multiply) instruction performs an unsigned multiplication of the source operand and the \_\_\_\_\_ .

Accumulator

76. When a 32 bit number is divided by a 16 bit number, the quotient is of \_\_\_\_\_.

16 bits

77. In the instruction MOV AX, 5 the number of operands are \_\_\_\_\_.

1

78. In DOS input buffer, number of characters actually read on return is stored in \_\_\_\_\_.

2nd byte

79. Which of the following is used to terminate a string in assembly language?

\$

80. In multitasking, which of the following interrupts is used as scheduler during context switching?

INT 8

81. We can set the current file position in DOS using service number \_\_\_\_\_.

0x42

82. In the context of video services, if we want to set cursor position which of the following will be the value of AH?

AH = 02h

83. Which of the following registers hold the page number for using the write string service of INT 10?

BH

84. \_\_\_\_\_ is the highest priority interrupt in interrupt controller.

IRQ 0

85. The 'program segment prefix' for com files is of size:

64 bytes

86. "INT 13-BIOS disk services" generally uses which register to return the 'error code'?

AH

87. Which of the following services of INT 10 is used for writing the string?

0x13

88. Which of the following INT 21 service is used to read character from standard input?

01

