

CS609-System Programming
Solved MCQS for Mid terms papers
Solved by JUNAID MALIK and Team



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1. _____ Interrupt is used to read date from Real Time Clock.

- 1A/02H
- 1A/03H
- **1A/04H** **Page 138**
- 1A/05H

2. If we are at address F000:0000H, then we are supposed to invoke interrupt (s) for

- **BIOS** **Page 10**
- COM4
- LPT3
- LPT1

3. There are two main types of interrupts known as _____.

- PC based interrupts and software interrupts
- Hardware interrupts and kernel based interrupts
- **Hardware interrupts and software interrupts** **Page 10**
- PC based interrupts and kernel based interrupts

4. The tail value of the keyboard indicates the _____ of the buffer.

- **Start** **Page 57**
- End
- Middle
- Tail

5. _____ is a Disk Interrupt.

- 9H
- 11H
- **13H** **Page 42**
- 15H

6. IRQ7 is used by the _____ interface.

- Keyboard
- Mouse
- **Printer** **Page 95**
- CPU

7. DSR stand for

- **DATA Set Ready** **Page 111**
- Data Service Ready

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- Data Serially Received
- Data Stock Ready

8. In RS-232C Standard (Serial Communication) data is send through_____line.

- RxD
- **TxD Page 111**
- DTR
- DSR

9. In a standard RS-232C Serial communication, a DTE device is usually a _____ and DCE device is usually a _____.

- **PC, Modem page 109**
- Modem, PC

10. Starting address of Interrupt Vector Table (IVT) in main memory is _____.

- **0 Page 12**
- 32
- 64
- 84

11. BIOS function 1Ah/06h is used to set _____.

- Time
- Date
- **Alarm Page 157**
- Data

12. Service 0 of INT _____ can be used to set the line parameter of the UART or COM port.

- **14H Page 119**
- 15H
- 13H
- 12H

13. Information about pending interrupts is held by_____.

- Interrupt Service Register
- Interrupt Service Register
- **Interrupt Request Register Page 50**
- Interrupt Required Register

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14. _____ register is used to store Interrupt service number.

- AL
- DH
- **AH** page 26
- CH

15. If the processor is 386 then the _____ bit of the EFLAGS register will not be set.

- 12th
- **18th** page 165
- 20th
- 24th

16. Interrupts _____ and it's service _____ are used to access disk.

- **13H, 3H** page 42
- 13H, 12H
- 09H, 3H
- 12H, 3H

17. The interval timer can operate in _____ modes.

- Three
- Four
- Five
- **Six** page 72

18. There are _____ main types of serial communication.

- **2** page 105
- 3
- 4
- 5

19. The BIOS interrupt 0x1Ah can be used to configure real time clock

- **TRUE** page 136
- FALSE

20. DOS command _____ gives the status of the memory and also points out which memory area is occupied by a particular process.

- **mem/d** page 13
- mem/e
- mem/m
- mem/s

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21. In order to produce the sound from PC internal Speaker we have to load the _____ bit divisor value at the _____ port.

- **8, 0x21** Page 73,74,75

- 16, 0x42

- 32, 0x32

- 62, 0x32

22. In interrupt 17h, if DX register contains 1, then I/O will be performed on _____

- LPT1

- **LPT2** page 84

- LPT3

- LPT4

23. If interrupt driven I/O is to be performed on printer, then _____ is needed to be programmed.

- **0x0F** page 95

- 0X0A

- 0X0C

- 0X0B

24. A standard PC can have _____ PPI.

- 1

- **4** page 84

- 8

- 16

25. Parallel Communication is economically feasible for _____.

- Large distances

- Medium distances

- **Small distances** page 82

- Very large distances

26. In keep() function, the paragraph is _____ bytes in size.

- 64

- 8

- **16** page 24

- 28

27. _____ is used to identify the cause of interrupt.

- Interrupt Enable Register

- **Interrupt ID Register** page 116

- Interrupt Status Register

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- FLAGS Register

28. The amount of memory above conventional memory can be determined using the service.

- **15H/88H** page 162
- 13H/88H
- 11H/88H
- 17H/88H

29. "The Intel 486 processor support CPUID instruction". This statement is .

- **True** page 166
- False

30. Which is the right way to invoke interrupts?

- Interrupt number
- Memory Address
- Location
- Name

31. NMI Stand for _____

- Non Maximum Interrupt
- **Non Maskable Interrupt** page 46
- Non Multitude Interrupt
- Non Multiplexed Interrupt

32. Track no. is stored in _____ register when interrupt 13H/3H is invoked.

- **CH** Page 42
- DH
- DL
- AL

33. Only _____ bit of Status Register D in Real Time Clock is important. The rest of the bits are not used.

- Least Significant
- **Most Significant** page 147

34. All Interval Timer channels are _____ bits wide.

- 4
- 8
- **16** page 73
- 32

35. The frequency of the periodic interrupt of Real Time Clock is specified in .

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- **Status Register A page 146**

- Status Register B
- Status Register C
- Status Register D

36. Interrupt_____ is a technique by which already implemented service can be altered by the Programmer

- **Stealing page 27**

- Invoking
- Calling
- Interception

37. In PPI interconnection,_____ bit is cleared to indicate the low nibble is being sent.

- a. D1
- b. D2
- c. D3

- d. **D4 page 100**

38. If bit rate in asynchronous serial communication is 9600, then bits are sampled after every_____seconds.

- 9600

- **1/9600 page 107**

- 1/96
- 96

36. The distinguishing factor between Intel coprocessor 80287 and 80387 is that only_____ allows reserve the sign of infinity.

- **80387 page 170**

- 80287

37. To disable alarm using interrupt 1AH (Real Time Clock), put_____in AH register.

- 04
- 05
- 06

- **07 page 140**

38. In Real Time Clock, the status_____ is used to specify the date time formats.

- **Register B page 146**

- Register C
- Register D
- Register E

39. BIOS data area starts from_____.

- 40:00H

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- 40:3DH
- **40:1EH** **Page 54**
- 40FFH

40. _____ controller within the PC is used to control I/O for monitor.

- CPU
- **Video** **Page 30**
- BUS
- TSR

41. The function of interrupt 9H is to translate the scan code into _____ and place it in the _____ buffer.

- IEEE code
- **ASCII code** **Page 44**
- BCD coder
- Binary values

42. Interrupts procedure are _____ procedure.

- **Reentrant** **Page 38**
- Non-Reentrant
- Recursive
- Virtual

43. In RS-232C Standard (Serial Communication) data is received through _____ line.

- **RxD** **page 111**
- TxD
- DTR
- DSR

47. The interrupt no. 65 is used _____.

- by DOS
- by BIOS
- **neither by DOS nor by BIOS** **page 20**
- both by DOS and BIOS

48. Delay in a program can be produced by using a word variable in BIOS Data Area.

- Single
- **Double** **page 75**
- Quad
- Quad double

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49. In self test mode the output of the UART is routed to its input.

- **TRUE** **page 117**

- FALSE

50. Lower two bytes of any Far address contains _____ address

- segment

- **offset** **page 20**

- both segment and offset

- NULL

51. Operating system information is in a special block on disk which is called _____.

- Interrupt Block
- OS Block
- Secondary Block

- **Boot Block** **page 42**

52. A code 0xFA on the port 60H (Keyboard Interface) indicates that the byte has been received _____.

- **Properly** **page 179**

- With Errors

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- With acknowledgement
- Duplicate values

53. DB25 connector is used to connect _____.

- Address Bus

- **PPI** **page 98**

- Mobile
- CPU

54. To store each character in keyboard buffer _____ bytes are required.

- **2** **page 54**

- 4
- 6
- 8

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55. DCE is _____

- **Data Communication Equipment** **page 109**

- Dual Communication Equipment
- Data Clearing Equipment
- Data Control Equipment

56. Bit number _____ of port 64H status register used for input buffer full

- 0
- **1** **Page 178**
- 2

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- 3

57. Interrupt number 8 is invoked by_____.

- DOS
- BIOS
- Hardware
- Operating System

• **Interrupt vector** **Page 22**

58. Sector no. is stored in_____register when interrupt 13H/3H is invoked.

- CH
- **CL** **page 42**
- DH
- DL

59. In interval timer, the port used for channel 0 is

- **40H** **page73**
- 41H
- 42H
- 43H

60. In case of asynchronous communication a timing signal is not required to identify_____.

- Start of the bit
- End of the bit
- Both start and end of the bit

• **Middle of the bit** **page 106**

61. The keyboard writes a code 0xFA on the port 60H to indicate that_____.

- Keyboard buffer is full
- **Byte received successfully** **page 179**
- Error in transmission
- Keyboard is not available

62. The address of partition block on hard disk is_____.

- **head # =1, track# = 0 and sector # =1** **page 42**
- head # =0, track# = 0 and sector # =0
- head # =1, track# = 1 and sector # =1
- head # =0, track# = 0 and sector # =1

63. Int 14H_____can be used to set the line parameter of the UART or COM port.

- **Service # 0** **page119**
- Service # 1

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- Service # 2
- Service # 3

64. In Self-Test mode of UART, the output of UART is _____ its input

- Different form
- **Routed back to page 117**
- Disconnected from
- Interchanged

65. The total size of Far Address is _____

- 2 bytes
- **4 bytes page 10**
- 8 bytes
- 16 bytes

66. _____ notifies the end of interrupt (EOI) to the programmable interrupt controller?

- **Programmer page 49**
- Microprocessor
- Operating system
- User

69. Interrupt _____ is empty, we can use its vector as a flag.

- 9H
- 13H
- 15H
- **65H page 65**

70. If the head and tail pointers of the Key board buffer are pointing to the same location then it means that the Keyboard buffer is/has _____.

- Full
- **Empty page 55**
- One entry
- Two entries

71. While invoking initialize() function to initialize COM ports, the port number must be placed in _____ register.

- AX
- BX
- CX
- **DX page 125**

72. UART is abbreviation for _____.

- Uniform Asynchronous Receiver Transmitter
- Unity Asynchronous Receiver Transmitter
- Used Asynchronous Receiver Transmitter

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- **Universal Asynchronous Receiver Transmitter** **page 107**

73. An I/O device cannot be directly connected to the buses so they generally require a _____ to be placed between the CPU and I/O device.

- **Controller** **page 83**

- Pipeline
- Data Bus
- I/O Bus

74. _____ returns the execution to the parent shell program.

- Keep()

- **Exit()** **page 24**

- Reset()
- Release

75. Bit number _____ of port 64H of Keyboard Status Register indicate status of Time-Out error during output.

- 4

- **5** **page 178**

- 6
- 7

76. Bit number _____ of co-processor control word is the interrupt Enable Flag

- **7** **Page 168**

- 8
- 9
- 10

77. If a device driver needs to change status of CAPS LOCK on keyboard, then _____ should be written on the keyboard.

- Control Byte

- **LED Status Byte** **page 180,181**

- CAPS LOCK Byte
- Typematic Rate

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78. Int 17H is used to control the _____ via BIOS.

- Keyboard

- **Printer** **page 84**

- Mouse
- CPU

79. To access battery powered RAM, only _____ ports are important from programming point of view.

- 72 and 71H

- **70 and 71H** **page 141**

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- 78 and 71H
- 70 and 77H

80. What is output of the following program;

```
#include<DOS.H.
```

```
Union REGS regs;
```

```
Void main(void)
```

```
{
```

```
Regs.h.al=0x99
```

- 00
- **99** **Page 17**
- 0099
- 9900

80. A software interrupt does not require _____

- Memory
- An Entry in IVT
- **EOI(End of Interrupt)** **page 49**
- Interrupt number

81. In UART, the line control register signify the _____

- Word size and length of stop bits
- Parity check and parity type
- Control bit
- **Word size, length of stop bits, parity check, parity type, and control bit** **Page 114**

82. Bit no. _____ of EFLAG is used for alignment check.

- 12
- 14
- 15
- **18** **page 164**

83. The bit _____ of line control register in UART, if set, indicates that the DLL and DLM will act as the device driver register.

- 1
- 3
- 5
- **7** **page 114**

84. Getting interrupt vector refers to the operation which is used to read the _____ address stored within vector.

- **far** **page 20**
- near

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- high
- short

85. Hardware Interrupts are _____

- preemptive
- **Non-Preemptive** page 48
- Both preemptive and Non-Preemptive
- Neither preemptive nor Non-Preemptive

86. Size of each entry in the IVT (Interrupt Vector Table) is of _____ bytes.

- **4** page 12

- 8
- 16
- 32

87. There are two types of communication Synchronous and Anti Synchronous.

- TRUE
- **FALSE** page 105

88. The Keyboard HOOK Service is always called by interrupt _____ after acquiring the scan code from keyboard port.

- 8H
- **9H** page 44
- 10H
- 21H

89. The input frequency used by the interval timer is the _____ signal generated by the clock.

- **PCLK** page 68
- CPKL
- ICP
- CL

90. The Keyboard Buffer is a memory area reserved in the _____

- **BIOS Data Area** page 54
- BOS Data Area
- Kernel
- Register

91. The PPI acts as an interface between the CPU and a parallel _____

- **I/O device** page 83
- Controller
- Control bus
- Data bus

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92. The input frequency used by the interval timer is the_____

- **PCLK** page 68

- CPKL
- ICP
- CL

93. The device which requires timing signal is called _____:

- **Synchronous** page 68
- Asynchronous
- Active
- Un-active

94. In interrupt 17H, if DX register contains 2, then I/O will be performed on__:

- LPT1
- LPT2
- **LPT3** page 84
- LPT4

94. Serial communication is____than parallel communication:

- **Faster** Pg#82
- Slower

97. If UART is running in Self-Test Mode, then all the input From the UART is directed to the_____

- Keyboard
- Upper part of the screen
- **Lower part of the screen** Pg#129
- Printer

98. If printer is_____then printer sends back the ACK signal to the printer interface.

- **.idle** Pg#88+94+97
- Busy
- Out-of-paper
- In paper jam error

99. The command “outportb (0x61,inportb(0x61)|3);” will

- **Turn on the speaker** Pg#74
- Turn off the speaker
- Toggle the speaker
- Damage the speaker

100. Keyboard buffer is_____bytes in size.

- 8
- 16
- **32** Pg#54
- 64

101. The_____function (in C language)initializes the COM port whose number

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is passed as a parameter using BIOS services.

- Initializecom()
- **Initialize () Pg#25**

- Recievechar ()
- initCOM()

102. BIOS supports _____ UARTS as COM ports.

- 6
- **4 Pg#113**
- 3
- 2

102. _____ is a device incorporated into the PC to update time even if the computer is OFF.

- Clock counter
- ROM
- Time Register
- **Real Time Clock Pg#136**

103. The RTC internally has an array of the registers which can be used to access the _____ battery powered CMOS RAM.

- **64 Bytes Pg#141**
- 32 Bytes
- 16 Bytes
- 8 Bytes

104. _____ is used to set date.

- 1A/02H
- 1A/03H
- 1A/04H
- **1A/05H Pg#139**

105. Parallel communication is not economically feasible for _____.

- Small Distance
- **Large Distance Pg#82**
- Smart Distance
- Narrow Distance

106. The bit _____ of line control register in UART, if cleared will indicate that DL is the data register.

- 3
- 5
- **7 Pg#114**
- 1

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107. Control Word controls the _____ rate of keyboard.

- Degree
- Frequency
- Timing

• **Typematic** **Pg#178**

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108. All the modes of interval Timer have different of the application.

- Sine
- **Square Pg#72**
- Trigonal
- Haphazard

109. Bit number _____ of Port 64H Status register used for output buffer full.

- 0
- **1 Page 178**
- 2
- 3

109. Interrupt services number is usually placed in _____ register.

- CH
- CL
- **AH Pg#26**
- AL

110. At IRQ7 interrupt # _____ is used.

- 0×0A
- 0×0B
- 0×0C
- **0×0F Pg#95**

111. The interval timer channels can be used as _____

- BCD Counter
- Binary Counter
- **Both BCD and Binary Counter Pg#72**
- Hexadecimal Counter

112. We have set the bit no 7 of IMR(Interrupt Mask Register) to unmask the interrupt so that interrupt _____ can occur at line.

- **0×f, IRQ7 Pg#96**
- 0×8, IRQ5
- 0×6, IRQ2
- 0×a, IRQ6

113. In the context of COM ports-----whenever received indicates the start of communication and----- whenever received indicates the temporary pause in the communication

- **XON & XOFF Pg#135**
- XOFF & XON
- XON & YOFF

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- YON & XOFF

114. First two bytes of any Far address contains ----- address

- Segment
- Offset
- **Both segment and offset Page 12**
- NULL

115. The baud rate is set in accordance with the divisor value loaded within the UART internal register base +0 and +1

- **True Page 114**
- False

116. ----- stores the base address for LPT1

- 40:00H
- 40:04H
- **40:08H My point of View**
- 40:1AH

117. DMA is an abbreviation for-----

- Distributed Memory access
- Data Managed access
- **Direct Memory access My Point of View**
- Dual Memory access

120. The scan code from keyboard presses and releases are stored in ----- register

- AH
- **AL Page no: 44**
- CH
- CL

121. Timer interrupts approximately occurs _____ times every second.

- 10.8
- 12.8
- 18.0
- **18.2 Page no: 28**

122. Interrupt _____ is used for keyboard input operations.

- 14
- 21

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- 65

• **9** **Page no: 34**

123. How many interrupt can be addressed via Interrupt Vector Table

- 4
- 256
- 512

• **1024** **Page no: 10**

124. In the context of COM ports AL register is treated as a _____

- Line status Register

• **Modem status Register** **Page no: 121**

- Command Register
- Control Register

125. In the context of keyboard interface _____ mean Typematic rate will be sent in next byte.

- 0xFF

• **0xF3** **Page no: 180**

- 0xED
- 0xE5

126. BPB stands for _____

- Base processing Block
- BIOS partition block

• **BIOS parameter block** **Page no : 242**

- BIOS processing block

127. Parameter in interrupt are passed through _____

- Stack

• **Register** **Page no:12**

- Array
- Link lists

128. when getting system information through interrupt 11H, it places the returned information in _____ register

• **AX** **Page no 161**

- BX
- CX
- DX

129. When reading data using interrupt 1AH from Real Time Clock we must place in AH register

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- 04
- 01

• **02** page 148

- 0A

130. Bit number _____ of port 64H of keyboard status register is used for parity error checking.

- 4
- 5
- 6

• **7** (Page 178)

131. The alarm can be set using BIOS function _____

1Ah/03h

- 1Ah/04h
- 1Ah/05h

• **1Ah/06h** Page no 139

132. The _____ service # is not used in any interrupt

- 01
- 02
- 03

• **FF** Page no 66

133. _____ used to determine the amount of conventional memory interfaced with the processor in kilobytes

- INT 10H
- INT 11H

• **INT 12H** page no 162

- INT 13H

134. Bit number _____ of port 64H of Keyboard Status Register indicate status of Time-Out during input.

○ 5

○ **6** page 178

○ 7

○ 4

135. Int 86() has _____ operator

○ 0

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- 1
- 2

○ **3** **Page 18**

135. Base address of LPT1 port in BIOS Data Area is

- 08:40
- **40:08** **page 91**
- 40:90
- 6C:40

134. The registers Flags, _____ are pushed on stack after execution of INT instructions and execution branches to interrupt procedure

- **CS and IP** **page 40**
- CS and SP
- IP and DS
- DS and SP

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135. The _____ function (in C language) enables the Self Test facility within the Modem Control Register of COM port

- STOn()
- SelfTest()
- **SelfTestOn()** **page 127**
- TestModemControl()

136. In case of synchronous communication a time signal is required to identify the start and end of a bit

- **TRUE** **page 105**
- FALSE

137. In main memory starting address of Interrupt Vector Table (IVT) is _____

- 64
- **0** **page 12**
- 34
- 84

138. In Keyboard Interface, _____ is LED control byte

- **0xED** **page 181**
- 0xFA
- 0xF3
- 0xFF

139. Display device (Monitor) performs

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- **Memory mapped I/O** page 30

- Isolated I/O
- Both Memory mapped and Isolated I/O
- Event-driven I/O

140. In the Context of COM ports, a _____ of the input and output bytes is maintained within the UART to facilitate more efficient

- Array

- **Queue** Page 118

- Linked List
- Stack

140. The RS-232C standard is used for _____

- **Serial Communication** page 110

- Parallel Communication

141. The printer interface uses the _____

- IRQ 6

- **IRQ 7** page 95

- IRQ 1
- IRQ 2

142. The printer interface uses the _____

- IRQ 6

- **IRQ 7** page 95

- IRQ 1
- IRQ 2

143. Every ISR (Interrupt Service Routine) should check service number in _____ perform the function accordingly

- **AH** page 26

- AL
- CH
- CL

144. Logical view of organized data is called

- Information

- **File** page 256

- Code

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- Structure

145. A three layered model in System Programming consists of following layers _____

- DOS, Windows, Hardware

- **DOS, BIOS, Windows**

- **DOS, BIOS, Hardware** page 3

- DOS, BUS, BIOS

134. The BIOS data area in memory starts at the address of _____

- 0020:0000

- 0030:0000

- **0040:0000** page 29

- 0050:0000

146. In _____ each byte is needed to be encapsulated in start and end

- Synchronous Communication

- **Asynchronous Communication** page 106

- Both Synchronous Communication and Asynchronous Communication

- Serial and Hybrid Communication

147. The _____ of Real Time Clock specifies the date and time formats

- Status Register A

- Status Register C

- **Status Register B** Pg#146

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- Status Register D

148. The BIOS interrupt _____ can be used to configure real time clock

- 0x13h

- **0x1Ah** Pg#136

- 0x1Bh

- 0x17h

149. _____ is used to get hardware environment information

- INT 10H

- **INT 11H** Pg#161

- INT 12H

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- INT 13H
150. POST BIOS routine is executed when system_____
- **Boots Up Google**
 - Delete
 - Hibernate
 - Sleep
151. The_____register of Real Time Clock is used to enable interrupt on various events like alarm time and time-up duration
- Status Register C
 - Status Register A
 - Status Register D
 - **Status Register B Pg#146**
152. The Segment Address of IVT is fixed at _____
- **0000H Pg#12**
 - 0001H
 - 000AH
 - 000FH
153. Programmable Interrupt Controller (PIC) has a total of___input
- Seven
 - **Eight Google**
 - Four
154. The Keyboard uses the port
- 60H
 - 61H
 - 62H
 - **64H Pg#177**
155. Timer interrupt number is _____
- INT 7
 - **INT 8 Pg#28**
 - INT 12

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- INT 21

156. Timer interrupt is invoked by means of _____

- Hardware
- Software

- **Hardware and Software Pg#10**

- Operating System Call

157. In interrupt interception with software interrupts, the original interrupt can be invoked

- At the start of ISR
- At the end of ISR
- In the middle of ISR

- **Anywhere in ISR Pg#28**

162. If the bits 14 -12 of EFLAGS are cleared. Then the process is only

- **286 page 164**
- 386
- 486
- 4004

163. If the processor is 385 then the _____ byte of the EFLAGS register will not be set.

- 12th

- **18th page 165**

- 20th

- 24th

164. The keyboard writes the code 0XFA on the port 60H to indicate the _____

- keyboard buffer is full

- **byte receives successfully Page no 179**

- error in transmission

- keyboard is not available

165. DTE is _____

- **Data terminal equipment Page no 109**

- Data transmitting equipment

- Dual terminal equipment

- Data termination equivalence

166. Standard PC operates in two modes in terms of memory which are _:

- **Real mode and Protected mode (Page 6)**

- Real mode and Extended mode

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- Base mode and Memory mode
- Kernel mode and Extended mode

167. _____ interrupt is used to read time from Real Time Clock:

- **1A/02H** **Page 137**

- 1A/03H
- 1A/04H
- 1A/05H

168. The BIOS data area in personal computer occupies _____ bytes.

- **256bytes** **(Google)**

- 512 bytes
- 1024bytes
- 2048bytes

169. The scan codes from keyboard presses and releases are stored in _____ register.

- AH
- **AL** **(Page 44)**
- CH
- CL

170. If real time clock interrupts microprocessor then interrupt will occur.

- 13h
- 17h
- **70h** **(Google)**
- 71h

171. Keyboard buffer works like a _____ data structure.

- Linked List
- Stack
- Queue
- **Circular Queue** **page 54+Google**

172. keep() function has _____ parameters while exit() has _____ parameters

- 0,2
- 1,2
- 2,0
- **2,1** **Page 66**

173. NMI (Non Maskable Interrupt) is used by _____

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- COM ports
- LPT ports
- Keyboard and timer

- **ALU circuitry which performs division** **Page 46**

173. While performing programmed I/O on the printer using BIOS service, we must check ____ of status Byte to see if Printer is busy or not

- **Most Significant Bit** **Page 85**

- Least Significant Bit
- Fourth Bit
- Third Bit

174. Communication between keyboard and keyboard controller is _____:

- Asynchronous serial
- **Synchronous serial** **Page 177**

- Multiple serial
- Parallel communication

175. Which registers are popped on the execution of IRET instruction?

- AX, FLAGS, CS
- **IP, CS, FLAGS** **Pg#40**
- CS ,IP , BP
- SP ,BP, SS

176. Which interrupt has the highest priority?

- **Keyboard Interrupt** **Pg#46**
- Interval timer
- Disk Interrupt
- Printer Interrupt

177. The standard PC has----- cascaded DMAs

- **2** **Page 186**
- 3
- 4
- 8

178. Frequency of clock signal measures the speed of the _____

- RAM
- BIOS

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- CPU Google
- Address Bus

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179. In isolated I/O, ___ are used to hold the data temporarily while sending or receiving the data from I/O device.

- Dedicated buffer
- Memory
- Registers
- I/O ports pg#29

180. In the context of Real Time Clock (RTC), the Clock Status Register, ___ is the main control register.

- A
- B pg#146
- D
- C

181. PPI stands for ___.

- Perpetual Programmable Interface
- Parallel Programming Interaction
- Parallel Printing Interface

• Peripheral Programmable Interface pg#76

182. A single interrupt controller can arbitrate among ___ different devices.

- 6
- 4
- 10

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• 8 page 47

178. Each Entry in Interrupt Vector Table(IVT) consists of __.

- 8 bytes
- 1024 bytes
- 4KB

• 4 bytes pg#12

178. The input character scan code is received at port_____.

• 60H pg#179

- 64H
- 62H
- 61H

178. The service_ is called the keyboard hook service.

• 15H/4FH pg#44

- 15H/FFH
- 15H/2FH
- 15H/2BH

178. In Keyboard Status Byte, bit no. 2 and 3 are used for CTRL and ALT keys respectively. Which of the following condition is used to check that CTRL + ALT keys are pressed?

Where:

Unsigned char far *
scr=(unsigned char
far*) (0x00400017);

• If (((*scr) & 12) == 12)

Page 52

- If (((*scr) & 8) == 8)
- If (((*scr) & 4) == 4)
- If (((*scr) & 2) == 2)

183. Suppose TX has current timer count stored in it and TIME is a pointer to timer count. Now, this while loop will produces delay of__.

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while ((TX+4)>=(*TIME));

- Half of a second
- Four seconds

• Quarter of a second Page 76

- Eight seconds

184. When setting time using Interrupt 1AH from Real Time Clock, we must place ____ in AH register.

• 03 Page 138

- 0A
- 04
- 01

185. What type of address is stored in Interrupt Vector Table (IVT)?

- Base Address
- Far Address Page 10
- Short Address
- Long Address

186. The extension of a TSR (Terminate and Stay Resident) program before compilation should be

- .EXE
- .COM
- .CPP
- .C Page 29+39

191. A compiled TSR program has _____ extension.

- .Doc
- .COM
- .XLS

• .C Page 29+39

192. Interrupt procedures are procedures

- Reentrant Page 38
- Non Reentrant
- Recursive
- Virtual

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193. Memory address 14H of the battery backed RAM contains_____.

- Configuration data
- Junk data

• **Configuration data** Page 159 AL-JUNAID INSTITUTE OF GROUP

- Diagram Data

194. Graphic adapter is a(n)_____.

- Processor

• **I/O controller** Google

- Memory
- Software

195. By cascading two DMA devices,_____bits can be transferred:

- 32
- **16**
- 8
- 4

Page 186

196. The output on the monitor is controlled by_____controller within the PC:

- TSR
- Image
- Bus

• **Video** Page 30

197. Maximum numbers of interrupts that are registered in IVT are_____.

- **0xFF** Page 12
- 0xEF
- 0xBF
- 0xAE

198. Boot block is a special block on disk which contains information about the_____to be loaded:

- Customer
- BIOS

• **Operating system** Page 42

- Users

199. In Text mode, monitor screen has a limit to print maximum of

• **2000** Page 33

- 1500
- 1800
- 2200

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200. The Interval Timer Command Register needed to be programmed_____loading the divisor for a channel:

- Before Page 71
- After

201. There are two types of communication synchronous and Asynchronous

- True Page 105
- False

202. Graphic adapter is a(n)_____.

- Processor
- I/O controller
- Memory
- Software My Point of View

203. In BIOS data area, some memory is reserved for _____

- RAM
- Kernel
- Keyboard Buffer Page 54
- Stack

204. To change the behaviour of an interrupt, we have to use_____function:

- changevect()
- keep()
- setvect() Page 22
- getvect()

205. _____signal(s) is/are available for microprocessor external interruption:

- Four
- One
- Two
- Eigh

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206. The capacity of keyboard buffer is _____:
- 32 character
 - 8 characters
 - 16 characters pg#54
 - 32 characters
207. System programming is the study of techniques that facilitates the acquisition of
- Data pg#3
 - Control
 - Power
 - Information
208. Interrupt _____ is used to get or set the time:
- 3AH
 - 0AH
 - 1AH pg#136
 - 2AH
209. The address read from the Interrupt Vector Table (IVT) can be used as:
- Function pointer pg#20
 - Variable
 - Function
 - Header file
210. Modem status register indicates the status of the _____:
- Modem Status line pg#118
 - Modem lines
 - DTE status line
 - Carry flag
211. The register which is not available in the UART device is _____:
- Receiver Buffer Register
 - Interrupt Focus Register pg#112
 - Line Status Register
 - Interrupt ID status
212. A single interrupt controller can arbitrate among _____ different devices:
- 6
 - 4
 - 8 pg#47
 - 10
213. Which of the following is an I/O controller?
- Processor
 - RAM

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- **Graphic adapter** **Page 5**

- Monitor

214. Every ISR (Interrupt Service Routine) should check service number in perform the function accordingly

- **AH** **page 26**

- AL
- CH
- CL

215. Logical view of organized data is called

- Information

- **File** **page 256**

- Code
- Structur