

MCQ Questions

July 21, 2022

Contents

1 Computer Organization	1
1.1 Previous Year Questions	1
1.2 Solutions	30

1 | Computer Organization

1.1 Previous Year Questions

1. The symbols used in an assembly language are ____ [JTO LICE 2014 Karnataka]
 - (A) Codes
 - (B) Mnemonics
 - (C) Assembler
 - (D) All (A),(B) and (C)
2. What DOS program can you run to see which serial ports are detected? [JTO LICE 2014 Karnataka]
 - (A) comdiag
 - (B) MSD
 - (C) command.com
 - (D) SDET
3. Memories in which any location can be reached in a fixed (and short) amount of time after specifying its address is called ____ [JTO LICE 2014 Karnataka]
 - (A) sequential-access memory
 - (B) random-access memory
 - (C) secondary memory
 - (D) mass storage
4. A microprocessor with 12 address lines is capable of addressing ____ [JTO LICE 2014 Karnataka]
 - (A) 1024 locations
 - (B) 2048 locations
 - (C) 4096 locations
 - (D) 64 K locations
5. I/O mapped systems identify their input/output devices by giving them a(n) ____ [JTO LICE 2014 Karnataka]
 - (A) 8-bit port number
 - (B) 16-bit port number
 - (C) 8-bit buffer number

- (D) 8-bit instruction
6. What type of circuit is used at the interface point of an input port in a microprocessor?
[JTO LICE 2014 Karnataka]
- (A) decoder
(B) latch
(C) tristate buffer
(D) none of the above
7. The synchronization between microprocessor and memory is done by ____ [JTO LICE 2014 Karnataka]
- (A) ALE signal
(B) HOLD signal
(C) READY signal
(D) none of the above
8. As compared to 16-bit microprocessor, 8-bit microprocessor are limited in ____ [JTO LICE 2014 Karnataka]
- (A) Speed
(B) Directly addressable memory
(C) Data handling capability
(D) all of the above (ie) A) and B) and C)
9. Which one of the following statements is true of TRAP, one of the hardware interrupts of 16-bit microprocessor?
[JTO LICE 2014 Karnataka]
- (A) It is level triggered
(B) It is negative edge triggered
(C) It is positive edge triggered
(D) Both (A) and (C)
10. The internal devices of 8255 are ____ [JTO LICE 2014 Karnataka]
- (A) port-A, port-B
(B) port-A, port-b and port-C
(C) port-A and port-C
(D) port-A
11. 8086 microprocessor uses ____ bit address to access memory and can directly access up to 1 mega-byte of memory.
[JTO LICE 2014 Karnataka]
- (A) 24
(B) 20
(C) 32

- (D) 36
12. A hard disk is divided into tracks which are further subdivided into ____ [JTO LICE 2014 Karnataka]
- (A) clusters
(B) sectors
(C) vectors
(D) heads
13. What tool is used to test serial and parallel port [JTO LICE 2014 Karnataka]
- (A) high volt probe
(B) cable scanner
(C) loop backs(wrap plugs)
(D) sniffers
14. A program that is employed in the development, repair or enhancement of other programs is known as ____ [JTO LICE 2014 Karnataka]
- (A) System software
(B) Software tool
(C) Applications program
(D) Utility program
15. Which DOS command is used to detect, diagnose and repair logical and physical disk errors on both, uncompressed and Double space compressed drive? [JTO LICE 2014 Karnataka]
- (A) DEFRAG
(B) SCANDISK
(C) DBLSPACE
(D) MSAV
16. To avoid the race condition, the number of processes that may be simultaneously inside their critical section is ____ [JTO LICE 2014 Karnataka]
- (A) 8
(B) 1
(C) 16
(D) 0
17. Trashing _____ [JTO LICE 2014 Karnataka]
- (A) is a natural consequence of virtual memory systems
(B) can always be avoided by swapping
(C) always occur on large computers
(D) can be caused by poor paging algorithms

18. A system program that sets up an executable program in main memory ready for execution is known as _____. **[JTO LICE 2014 Karnataka]**
- (A) Assembler
 - (B) Loader
 - (C) Linker
 - (D) Compiler
19. Fragmentation of the file system _____. **[JTO LICE 2014 Karnataka]**
- (A) occurs only if the file system is used improperly
 - (B) can always be prevented
 - (C) can be temporarily removed by compaction
 - (D) is a characteristic of all file system
20. Interprocess communication _____. **[JTO LICE 2014 Karnataka]**
- (A) is required for all processes
 - (B) is usually done via disk drives
 - (C) is never necessary,
 - (D) allows processes to synchronize activity
21. The devices that provide the means for a computer to communicate with the user or other computers are referred to as: **[JTO LICE 2013 Bihar]**
- (A) CPU
 - (B) ALU
 - (C) I/O
 - (D) none of these
22. The software used to drive microprocessor-based systems is called: **[JTO LICE 2013 Bihar]**
- (A) assembly language
 - (B) Firmware
 - (C) machine language code
 - (D) BASIC interpreter instructions
23. All computer programs for a machine are called **[JTO LICE 2013 Bihar]**
- (A) software
 - (B) firmware
 - (C) hardware
 - (D) none of these
24. The 8085A is a(n): **[JTO LICE 2013 Bihar]**
- (A) 16-bit parallel CPU
 - (B) 8-bit serial CPU

- (C) 8-bit parallel CPU
- (D) none of these
25. Because microprocessor CPUs do not understand mnemonics as they are, they have to be converted to _____ **[JTO LICE 2013 Bihar]**
- (A) hexadecimal machine code
- (B) binary machine code
- (C) assembly language
- (D) all of these
26. A register in the microprocessor that keeps track of the answer or results of any arithmetic or logic operation is the: **[JTO LICE 2013 Bihar]**
- (A) stack pointer
- (B) program counter
- (C) Instruction pointer
- (D) Accumulator
27. How many buses are connected as part of the 8085A microprocessor? **[JTO LICE 2013 Bihar]**
- (A) 2
- (B) 3
- (C) 5
- (D) 8
28. The register in a 8085A that is used to keep track the memory address of the next op-code to run in the program is the: **[JTO LICE 2013 Bihar]**
- (A) stack pointer
- (B) program counter
- (C) instruction pointer
- (D) accumulator
29. Where does a computer add and compare data? **[JTO LICE 2013 Bihar]**
- (A) Hard disk
- (B) Floppy disk
- (C) CPU chip
- (D) Memory chip
30. Which of the following registers is used to keep track of address of the memory location where the next instruction is located? **[JTO LICE 2013 Bihar]**
- (A) Memory Address Register
- (B) Memory Data Register
- (C) Instruction Register
- (D) Program Counter

31. A complete microcomputer system consists of **[JTO LICE 2013 Bihar]**
- (A) microprocessor
 - (B) memory
 - (C) peripheral equipment
 - (D) all of these
32. A stack is **[JTO LICE 2013 Bihar]**
- (A) an 8-bit register in a microprocessor
 - (B) a 16-bit register in a microprocessor
 - (C) a set of memory locations in R/WM reserved for storing information temporarily during the execution of computer
 - (D) a 16-bit memory address stored in the program counter
33. A stack pointer is **[JTO LICE 2013 Bihar]**
- (A) a 16-bit register in the microprocessor that indicate the beginning of the stack memory.
 - (B) a register that decodes and execute 16-bit arithmetic expression
 - (C) The first memory location where a subroutine address is stored
 - (D) a register in which flag bits are stored
34. The branch logic that provides decision making capabilities in the control unit is known as **[JTO LICE 2013 Bihar]**
- (A) controlled transfer
 - (B) conditional transfer
 - (C) unconditional transfer
 - (D) none of the above
35. Interrupts which are initiated by an instruction are **[JTO LICE 2013 Bihar]**
- (A) internal
 - (B) external
 - (C) hardware
 - (D) software
36. A time sharing system imply **[JTO LICE 2013 Bihar]**
- (A) more than one processor in the system
 - (B) more than one program in memory
 - (C) more than one memory in the system
 - (D) none of these
37. The larger the RAM of a computer, the faster is its speed, since it eliminates **[JTO LICE 2013 Bihar]**
- (A) need for ROM

- (B) need for external memory
 - (C) frequency disk I/O s
 - (D) need for a data-wide path
38. The number of bits needed to address 4K memory is **[JTO LICE 2013 Bihar]**
- (A) 6
 - (B) 8
 - (C) 12
 - (D) 16
39. In DOS what file contains commands that configure systems devices ? **[JTO LICE 2013 Chennai]**
- (A) command.com
 - (B) config.sys
 - (C) Autoexe.bat
 - (D) win.ini
40. RS-232 is a standard that applies to **[JTO LICE 2013 Chennai]**
- (A) Serial ports
 - (B) Parallel ports
 - (C) game ports
 - (D) networks
41. Which bus is bidirectional in 8086? **[JTO LICE 2013 Chennai]**
- (A) Data bus
 - (B) Control bus
 - (C) Address bus
 - (D) Multiplexed bus
42. The brain of any computer system is **[JTO LICE 2013 Chennai]**
- (A) ALU
 - (B) Memory
 - (C) CPU
 - (D) Control Unit
43. The technique of assigning a memory address to each I/O device in SAM system is called **[JTO LICE 2013 Chennai]**
- (A) wired I/O
 - (B) I/O mapping
 - (C) dedicated I/O
 - (D) memory mapped I/O

44. To organize files in a disk, MS-DOS separates them into areas called **[JTO LICE 2013 Chennai]**
- (A) directories
 - (B) buckets
 - (C) areas
 - (D) area directories
45. What tool is used to test serial and parallel ports of a computer? **[JTO LICE 2013 Chennai]**
- (A) High volt probe
 - (B) cable scanner
 - (C) loop backs(wrap plugs)
 - (D) sniffer
46. The co-processor signal given to 8086(8386DX) is **[JTO LICE 2013 Chennai]**
- (A) BUSY
 - (B) PEREQ
 - (C) INTR
 - (D) READY
47. Identify the highest priority interrupt in 8086 **[JTO LICE 2013 Chennai]**
- (A) External hardware interrupt
 - (B) Non mask-able interrupt
 - (C) Software interrupt
 - (D) Internal interrupt and exceptions
48. The data bus of 8086 is **[JTO LICE 2013 Chennai]**
- (A) 16 bit wide
 - (B) 8 bit wide
 - (C) 32 bit wide
 - (D) 4 bit wide
49. In the given instruction for 8086, MOV AH,[BX][SI]+1234H identify the addressing mode **[JTO LICE 2013 Chennai]**
- (A) Base addressing mode
 - (B) index addressing mode
 - (C) Register addressing mode
 - (D) Base index addressing mode
50. initiation of DMA process is carried out by the issue of the following signal **[JTO LICE 2013 Chennai]**
- (A) HLDA

- (B) HLD
 - (C) HOLD
 - (D) DMA
51. A translator which converts High Level Language to machine code is **[JTO LICE 2013 Chennai]**
- (A) Parser
 - (B) Assembler
 - (C) Compiler
 - (D) Macro
52. A deadlock situation can arise in which of the following condition of a process **[JTO LICE 2013 Chennai]**
- (A) Mutual exclusion and hold and wait
 - (B) Circular wait and preemption
 - (C) Circular wait and no preemption
 - (D) Both (a) and (c)
53. Paging is a memory management scheme that enables **[JTO LICE 2013 Chennai]**
- (A) Permitting the physical address space of a process to be non-contiguous
 - (B) Avoiding external fragmentation and the need for compaction
 - (C) Avoiding deadlock
 - (D) Both (A) and (B)
54. A macro definition consists of **[JTO LICE 2013 Chennai]**
- (A) macro prototype statement and one or more model statement
 - (B) Macro preprocessor statement
 - (C) Microprocessor statement
 - (D) Both (A) and (B)
55. In a Personal Computer the BIOS is stored in its **[JTO LICE 2013 Chennai]**
- (A) ROM
 - (B) RAM
 - (C) Hard Disk
 - (D) External memory
56. The input units of a computer: **[JTO LICE 2013 Maharastra]**
- (A) feeds the data in CPU
 - (B) retrieves data from CPU
 - (C) directs all other units
 - (D) all of these.

57. Which of the following storage devices can be carried around? [JTO LICE 2013 Maharashtra]
(A) Floppy disks
(B) Main Memory
(C) Registers
(D) Core memory
58. Computer software consists of: [JTO LICE 2013 Maharashtra]
(A) System program
(B) Application program
(C) Operating System program
(D) All of the these
59. One Megabyte is equivalent to: [JTO LICE 2013 Maharashtra]
(A) 2^{10} bytes
(B) 2^{20} bytes
(C) 2^{30} bytes
(D) None of these
60. Which of the following is an example of volatile memory: [JTO LICE 2013 Maharashtra]
(A) ROM
(B) RAM
(C) PROM
(D) Hard Disk
61. Intel 8086 is a: [JTO LICE 2013 Maharashtra]
(A) 8 bit microprocessor
(B) 16 bit microprocessor
(C) 32 bit microprocessor
(D) none of these
62. Six bytes means: [JTO LICE 2013 Maharashtra]
(A) 6 bits
(B) 24 bits
(C) 48 bits
(D) 96 bits
63. A microprocessor contains: [JTO LICE 2013 Maharashtra]
(A) most of the control and arithmetic logic function of a computer
(B) most of the RAM
(C) most of ROM

- (D) peripheral drivers
64. A 32 bit microprocessor has the word length: **[JTO LICE 2013 Maharashtra]**
- (A) 2 bytes
 - (B) 1 bytes
 - (C) 4 bytes
 - (D) 8 bytes
65. RAM stands for: **[JTO LICE 2013 Maharashtra]**
- (A) Relative Access Memory
 - (B) Random Access Memory
 - (C) Random Array Manager
 - (D) Read Array Memory
66. A bootstrap is: **[JTO LICE 2013 Madhya Pradesh]**
- (A) A memory device
 - (B) A device to support the computer
 - (C) A small initialisation program to start up a computer
 - (D) An error correction technique
67. Status register is also called as **[JTO LICE 2013 Madhya Pradesh]**
- (A) Accumulator
 - (B) Stack
 - (C) Counter
 - (D) Flags
68. What part of the Operating System (OS) stores utilities or frequently accessed functions? **[JTO LICE 2013 Madhya Pradesh]**
- (A) Memory
 - (B) Registers
 - (C) Kernel
 - (D) None of these
69. In 8086 the overflow flag is set when **[JTO LICE 2013 Madhya Pradesh]**
- (A) The sum is more than 16 bits
 - (B) Signed numbers go out of their range after an arithmetic operation
 - (C) Carry and sign flags are set
 - (D) During subtraction
70. 8088 microprocessor differs with 8086 microprocessor in **[JTO LICE 2013 Madhya Pradesh]**
- (A) Data width on the output
 - (B) Address capability

- (C) Support of coprocessor
- (D) Support of MAX / MIN mode
71. In a 8086/8088 Microprocessor, the unit responsible for getting the instructions from memory and loading in the Queue is **[JTO LICE 2013 Madhya Pradesh]**
- (A) Execution Unit
- (B) Registers
- (C) Stack
- (D) Bus Interface Unit
72. Cache is usually the _____ of memory access by the microprocessor **[JTO LICE 2013 Madhya Pradesh]**
- (A) First level
- (B) Second level
- (C) Third level
- (D) Fourth level
73. Which causes the microprocessor to immediately terminate its present activity: **[JTO LICE 2013 Madhya Pradesh]**
- (A) RESET signal
- (B) INTERRUPT signal
- (C) Both A) and B)
- (D) None of these
74. Which method bypasses the CPU for certain types of data transfer? **[JTO LICE 2013 Madhya Pradesh]**
- (A) Software interrupts
- (B) Interrupt — driven I/O
- (C) Polled I/O
- (D) Direct memory access (DMA)
75. Which chip used for A/D and D/A converters in 8086 processor? **[JTO LICE 2013 Madhya Pradesh]**
- (A) 8251
- (B) 8255
- (C) 8254
- (D) 8259
76. The interrupt service request is serviced - **[JTO LICE 2013 Madhya Pradesh]**
- (A) immediately on receipt of request
- (B) after the execution of the current instruction is completed
- (C) at the end of the current machine cycle
- (D) any time

77. The number of chips required to realize $8K \times 8$ RAM using $8K \times 1$ RAM is [JTO LICE 2013 Madhya Pradesh]
- (A) 2
 - (B) 4
 - (C) 6
 - (D) 8
78. In microprocessors architecture, flag indicates - [JTO LICE 2013 Madhya Pradesh]
- (A) the bit size of the microprocessor
 - (B) the internal status of the CPU
 - (C) the number of microprocessor
 - (D) the name of manufacturer
79. The interrupt input of 8085 which has the highest priority is - [JTO LICE 2013 Madhya Pradesh]
- (A) RST 7.5
 - (B) RST 6.5
 - (C) TRAP
 - (D) INTR
80. The advantage of the parallel data communication over the serial data communication are [JTO LICE 2013 Madhya Pradesh]
- (A) requires less number of lines between transmitter and receiver
 - (B) large speed of transmission
 - (C) cheaper
 - (D) need of series to parallel and parallel to series conversion
81. The mnemonics used in writing a program is called - [JTO LICE 2013 Madhya Pradesh]
- (A) assembly language
 - (B) fetch cycle
 - (C) micro-instruction
 - (D) object program
82. PASCAL, a structural programming language was developed by - [JTO LICE 2013 Madhya Pradesh]
- (A) Niklaus
 - (B) Pascal B.
 - (C) George Boale
 - (D) none of the above

83. _____ is not a high level computer programming language [JTO LICE 2013 Madhya Pradesh]
(A) ALGOL
(B) COBOL
(C) FORTRAN
(D) MODEM
84. An operating system is a/an - [JTO LICE 2013 Madhya Pradesh]
(A) hardware component of a mainframe computer system
(B) application program that produces text files
(C) software program that enables the computer hardware to communicate and operate with the computer software
(D) system of procedures for operating a computer
85. The bandwidth of an n-bit binary coded PCM signal for an original signal bandwidth of B Hz is [JTO LICE 2013 Madhya Pradesh]
(A) B Hz
(B) nB Hz
(C) (B/n) Hz
(D) n^2B Hz
86. The maximum integer which can be stored on a 8 bit accumulator is [JTO LICE 2013 Punjab]
(A) 112
(B) 200
(C) 255
(D) 224
87. Which of the following memories in a computer is volatile? [JTO LICE 2013 Punjab]
(A) RAM
(B) ROM
(C) EPROM
(D) ALL
88. Which bus is bidirectional? [JTO LICE 2013 Punjab]
(A) Address bus
(B) Control bus
(C) Data bus
(D) None of the above
89. Which disk Interface standard Includes support for up to eight peripheral devices? [JTO LICE 2013 Punjab]

- (A) ST50G/412
- (B) IDE
- (C) SCSI
- (D) ESDI

90. Which file system does Windows 95 typically use? **[JTO LICE 2013 Punjab]**

- (A) FAT16
- (B) FAT32
- (C) NTFS
- (D) LMFS

91. CPU performance is measured through **[JTO LICE 2013 Punjab]**

- (A) Throughput
- (B) MHz
- (C) Flaps
- (D) None of the above

92. which one is not an operating system **[JTO LICE 2013 Punjab]**

- (A) Linux
- (B) MAC
- (C) Android
- (D) Opera

93. A hard disk is divided into tracks which are further subdivided into: **[JTO LICE 2013 Punjab]**

- (A) clusters
- (B) sectors
- (C) vectors
- (D) heads

94. A 25-pin female connector on the back of traditional desktop computer will typically be: **[JTO LICE 2013 Punjab]**

- (A) Serial port
- (B) A parallel port
- (C) Docking
- (D) COM port

95. When a computer is switched on, where is the operating system loaded? **[JTO LICE 2013 Punjab]**

- (A) BIOS
- (B) ROM

(C) POST

(D) RAM

96. An example of an application package is

[JTO LICE 2013 Punjab]

(A) Windows 7

(B) Linux

(C) OS/2

(D) MS Office

97. What is the transfer rate of USB 2.0?

[JTO LICE 2013 Punjab]

(A) 12Mbps

(B) 64Mbps

(C) 256Mbps

(D) 480Mbps

98. SP stands for:

[JTO LICE 2013 Punjab]

(A) status pointer

(B) stack pointer

(C) A and B

(D) None of these

99. The external device is connected to a pin called the _____ pin on the processor chip.

[JTO LICE 2013 Punjab]

(A) Interrupt

(B) Transfer

(C) Both

(D) None of these

100. In 8086 microprocessor the following has the highest priority among all type of interrupts

[JTO LICE 2013 Punjab]

(A) NMI

(B) DIV 0

(C) TYPE 255

(D) OVER FLOW

101. _____ is a dedicated processor that combines interface unit and DMA as one unit:

[JTO LICE 2013 Punjab]

(A) Input-Output Processor

(B) Only input processor

(C) Only output processor

(D) None of these

102. Which signal represents synchronization signal decided by interprocess arbitration with a certain delay or signal DMA: **[JTO LICE 2013 Punjab]**
- (A) BAL
 - (B) BNA
 - (C) Both
 - (D) None of these
103. The no. of wait states required to interface 8279 to 8086 with 8MHz clock are **[JTO LICE 2013 Punjab]**
- (A) Two
 - (B) Three
 - (C) One
 - (D) None
104. Which is designed to automatically manage the handshake operations **[JTO LICE 2013 Punjab]**
- (A) 8251
 - (B) 8254
 - (C) 8255
 - (D) 8259
105. Which mode is used for double handshake in 8255 **[JTO LICE 2013 Punjab]**
- (A) Mode 0
 - (B) Mode 1
 - (C) Mode 2
 - (D) None of these
106. In ADC 0808 if _____ enables output **[JTO LICE 2013 Punjab]**
- (A) EOC
 - (B) 1/P0-1/P7
 - (C) SOC
 - (D) OE
107. The Arithmetic and Logic Unit contains a number of high speed storage devices called **[JTO LICE 2013 CTD]**
- (A) magnetic disks
 - (B) hard disks
 - (C) semiconductor memories
 - (D) registers
108. Direct memory access allows for the transfer of blocks of data from memory to an I/O device (or vice-versa) without using the **[JTO LICE 2013 CTD]**
- (A) data bus

- (B) control bus
 - (C) DMA controller
 - (D) CPU
109. The register which holds the address of the location to or from which data are to be transferred is called **[JTO LICE 2013 CTD]**
- (A) stack pointer
 - (B) instruction register
 - (C) memory address register
 - (D) memory data register
110. Which of the following registers is used to keep track of address of the memory location where the next Instruction is located? **[JTO LICE 2013 CTD]**
- (A) Program counter
 - (B) Stack pointer
 - (C) Instruction register
 - (D) Memory address register
111. The central processing unit after receiving an interrupt from an input/output device **[JTO LICE 2013 CTD]**
- (A) slows the speed of execution
 - (B) hands over control of address bus and data bus to the Interrupting device
 - (C) branches off to the Interrupt service routine immediately
 - (D) branches off to the interrupt service routine after completion of the current instruction
112. Select the correct statement from the followings **[JTO LICE 2013 CTD]**
- (A) Loop instructions cannot be interrupted till they complete
 - (B) Only level triggered interrupts are possible in microprocessors
 - (C) A processor checks for interrupts before executing a new instruction
 - (D) Unless enabled, a processor will not be able to process interrupts
113. A memory system of size 16 Kbytes is required to be designed using memory chips which have 12 address lines and 4 data lines each. The number of such chips required to design the memory system is **[JTO LICE 2013 CTD]**
- (A) 2
 - (B) 4
 - (C) 8
 - (D) 16
114. If $CS = A'_{15}A_{14}A_{13}$ is used as the chip select logic of a 4K RAM in an 8085 micro-processor system, then its memory range will be **[JTO LICE 2013 CTD]**

- (A) 3000 H - 3FFF H
- (B) 7000 H - 7FFF H
- (C) 5000 H - 5FFF H & 6000 H - 6FFF H
- (D) 6000 H - 6FFF H & 7000 H - 7FFF H

115. The following sequence of Instructions are executed by a 8085 microprocessor

```
1000    LXI    SP    27FF
1000    CALL           1006
1006    POP     H
```

The contents of the stack pointer(SP) and the HL register pair on completion of execution of these instructions are

[JTO LICE 2013 CTD]

- (A) SP = 27 FF, HL = 1003
- (B) SP = 27 FD, HL = 1003
- (C) SP = 27 FF, HL = 1006
- (D) SP = 27 FD, HL = 1006

116. The contents of Accumulator(A) and Register (B) of 8085 microprocessor are 3A H and 49 H respectively, The contents of A and the status carry flag(CY) and sign flag(S) after execution of SUB B instruction are

[JTO LICE 2013 CTD]

- (A) A = FO, CY = 0, S = 0
- (B) A = F1, CY = 1, S = 1
- (C) A = 0F, CY = 1, S = 0
- (D) A = 1F, CY = 1, S = 1

117. The following program is run on an 8085 microprocessor.

```
2000    LXI    SP,    1000 H
2003    PUSH    H
2004    PUSH    D
```

```
2005    CALL           2050
newlinenewline 2008    POP H
2009    HIT
```

At the completion of execution of the program, the contents of the Program Counter and Stack Pointer of the microprocessor are respectively

[JTO LICE 2013 CTD]

- (A) 2050 H and OFFC H
- (B) 2020 H and OCCF H
- (C) 2000 H and CCFO H
- (D) 2020 H and OFFC H

118. What part of the OS stores utility or frequently accessed functions? [JTO LICE 2013 Jharkhand]

- (A) Memory
- (B) Registers
- (C) Kernel

- (D) None of the above
119. In DMA write operations the data is transferred [JTO LICE 2013 Jharkhand]
- (A) From I/O to memory
 - (B) From Memory to I/O
 - (C) From Memory to Memory
 - (D) From I/O to I/O
120. What will the contents of the register AL after the following has been executed
Mov B1; 8C
Mov A1; 7E
Add A1; BL
[JTO LICE 2013 Jharkhand]
- (A) OA and Carry Flag is set
 - (B) OA and Carry Flag is reset
 - (C) 6A and Carry Flag is set
 - (D) 6A Carry Flag is reset
121. Ready Pin of a microprocessor is used [JTO LICE 2013 Jharkhand]
- (A) To indicate that the microprocessor is ready to receive input
 - (B) To indicate that the microprocessor is ready to receive output
 - (C) To introduce wait state
 - (D) To provide direct memory access
122. Hard Disk in the computer is [JTO LICE 2013 JK]
- (A) Primary Memory
 - (B) Secondary Memory
 - (C) Tertiary Memory
 - (D) None of above
123. One Mega Bits is equal to [JTO LICE 2013 JK]
- (A) 2^{10} Bits
 - (B) 2^{20} Bits
 - (C) 2^{30} Bits
 - (D) 2^{40} Bits
124. 8086 microprocessor is _____ Bit microprocessor [JTO LICE 2013 JK]
- (A) 8 Bit
 - (B) 16 Bit
 - (C) 20 Bit
 - (D) 12 Bit
125. In DMA write operation the data is transferred [JTO(T) LICE 2013 Himachal Pradesh]

- (A) From I/O to memory
 - (B) From memory to I/O
 - (C) From memory to memory
 - (D) From I/O to I/O
126. In a Optical fiber, the propagation of signal happens due to: **[JTO LICE 2013 Assam]**
- (A) Total internal reflection
 - (B) refraction
 - (C) dispersion
 - (D) Attenuation
127. Principle of Locality is used to justify **[JTO LICE 2013 Assam]**
- (A) DMA
 - (B) Interrupt
 - (C) Cache memory
 - (D) Polling
128. In 8086 the overflow flag is set when **[JTO LICE 2013 Assam]**
- (A) The sum is more than 16 bits
 - (B) Signed numbers go out of their range after an arithmetic operation
 - (C) Carry and sign flags are set
 - (D) during subtraction
129. The 8279 normally provides a maximum of _____ seven segment display interface with CPU. **[JTO LICE 2013 Assam]**
- (A) 8
 - (B) 16
 - (C) 32
 - (D) 18
130. PROM's are used to store **[AP-JTO(T)LICE 2013]**
- (A) bulk information
 - (B) sequential information
 - (C) Information to be accessed rarely
 - (D) relatively permanent information
131. Register variable stored in **[AP-JTO(T)LICE 2013]**
- (A) CPU
 - (B) RAM
 - (C) ROM
 - (D) Peripheral memory

132. An OP code [AP-JTO(T)LICE 2013]
(A) translates a mnemonic
(B) instructs the CPU
(C) Stores data
(D) all the above
133. Every processor must necessarily have [AP-JTO(T)LICE 2013]
(A) data bus
(B) data bus and address bus
(C) control bus
(D) data bus, a control bus and an address bus
134. An instruction used to set the carry flag in a computer can be classified as [AP-JTO(T)LICE 2013]
(A) data transfer
(B) arithmetic
(C) logical
(D) Program control
135. Coaxial lines are coupled to the waveguides by means of [AP-JTO(T)LICE 2013]
(A) coupling loops
(B) Probes
(C) either probes or coupling loops
(D) none of these
136. The difference between memory and storage is that memory is _____ and storage is _____ [UP(WEST) JTO LICE 2013]
(A) Temporary,permanent
(B) Permanent,temporary
(C) Slow,fast
(D) none of these
137. CD-ROM is a [UP(WEST) JTO LICE 2013]
(A) Semiconductor memory
(B) Memory register
(C) Magnetic memory
(D) none of these
138. Which of the following is called low level languages? [UP(WEST) JTO LICE 2013]
(A) Machine language
(B) Assembly language

- (C) Both of these
(D) None of these
139. A communication device that combines transmissions from several I/O devices into one line is a [UP(WEST) JTO LICE 2013]
(A) Concentrator
(B) modifier
(C) multiplexer
(D) full-duplex line
140. Communication between a computer and a keyboard involves _____ [UP(WEST) JTO LICE 2013]
(A) Simplex
(B) Half Duplex
(C) Full Duplex
(D) Automatic
141. Which part of the Operating system(OS) stores utilities or frequently accessed functions? [UP(WEST) JTO LICE 2013]
(A) Memory
(B) Registers
(C) Kernel
(D) None of these
142. Voice over IP (Voice over Internet Protocol or "VoIP") technology converts voice calls from [UP(WEST) JTO LICE 2013]
(A) Analog to digital
(B) Digital to analog
(C) It depends on power
(D) None of these
143. CD-ROM is a [UP(E)-JTO(T) LICE 2013]
(A) Semiconductor memory
(B) Memory register
(C) Magnetic memory
(D) None of these
144. A bootstrap is: [UP(E)-JTO(T) LICE 2013]
(A) A memory device
(B) A device to support the computer
(C) A small initialisation program to start up a computer
(D) An error correction technique

145. The functions of SS7 are [UP(E)-JTO(T) LICE 2013]
- (A) Controlling network
 - (B) Set up and tear down the call
 - (C) Handles the routines decision
 - (D) All of these
146. Cache is usually the _____ of memory access by the microprocessor [UP(E)-JTO(T) LICE 2013]
- (A) First level
 - (B) Second level
 - (C) Third level
 - (D) Fourth level
147. Which causes the microprocessor to immediately terminate its present activity? [UP(E)-JTO(T) LICE 2013]
- (A) RESET signal
 - (B) INTERRUPT signal
 - (C) Both (a) & (b)
 - (D) None of these
148. Identify from the following which is not a DNS resource record type [Tamilnadu-JTO (T) LICE 2013]
- (A) MX - MAIL Exchange
 - (B) NS - Name Server
 - (C) PTR - Pointer
 - (D) FT - File Transfer
149. When an interrupt occurs in an operating system [Tamilnadu-JTO (T) LICE 2013]
- (A) Always changes the state of the interrupted process after processing the interrupt
 - (B) Always resumes execution of the interrupted process after processing the interrupt
 - (C) Ignores the interrupt
 - (D) None of the above
150. The three main components of a digital computer system [Tamilnadu-JTO (T) LICE 2013]
- (A) Memory, CPU, I/O
 - (B) ALU, CPU, Memory
 - (C) Registers, ALU, Control circuits

(D) I/O, DMA, memory

151. The root directory of a disc should be placed

[Tamilnadu-JTO (T) LICE 2013]

- (A) At a fixed address in main memory
- (B) At a fixed location on the system disc
- (C) Anywhere on the disc
- (D) At a fixed location on the disk

152. Listing a software in a assembly language is preferred to writing in a high level language when

[Tamilnadu-JTO (T) LICE 2013]

- (A) Memory space is limited
- (B) Optimal use of the hardware resources available is of primary concern
- (C) Portability is important
- (D) Programmer's productivity not important

153. The topology with higher reliability is

[Tamilnadu-JTO (T) LICE 2013]

- (A) Bus topology
- (B) Star topology
- (C) Ring topology
- (D) Mesh topology

154. A memory of 8K means

[JTO(T) LICE 2013 Chhatisghadh]

- (A) 10^8
- (B) 8000
- (C) 8×1024
- (D) 8024

155. Which of the following registers is used to keep track of address of the memory location where the next instruction is located?

[JTO 2016]

- (A) Memory Address Register
- (B) Memory Data Register
- (C) Instruction Register
- (D) Program Counter

156. What is meant by a dedicated computer?

[JTO 2016]

- (A) which is used by one person only
- (B) which is assigned to one and only one task
- (C) which does one kind of software
- (D) which is meant for application software only

157. Which among following can be considered as most advanced ROM ? [JTO 2016]
- (A) DRAM
 - (B) EEPROM
 - (C) RAM
 - (D) PROM
158. User programs interact with I/O devices through ? [JTO 2016]
- (A) Operating System
 - (B) Hardware
 - (C) Buses
 - (D) Processor
159. A number system that uses only two digits, 0 and 1 is known as ? [JTO 2016]
- (A) Octal number system
 - (B) Hexadecimal system
 - (C) Binary system
 - (D) Decimal system
160. ISP stands for, [JTO 2016]
- (A) Instruction Set Processor
 - (B) Information Standard Processing
 - (C) Interchange Standard Protocol
 - (D) Interrupt Service Procedure
161. Which memory device is generally made of semi-conductors ? [JTO 2016]
- (A) RAM
 - (B) Hard disk
 - (C) Floppy disk
 - (D) Cd disk
162. How many 128 x 8 RAM chips are needed to provide a memory capacity of 2048 bytes? [JTO 2016]
- (A) 8
 - (B) 16
 - (C) 24
 - (D) 32
163. A CPU contains [JTO 2016]
- (A) a card reader and a printing device
 - (B) an analytical engine and a control unit

- (C) a control unit and an arithmetic logic unit
(D) an arithmetic logic unit and a card reader
164. EPROM stands for: [JTO 2016]
(A) Erasable Programmable read-only memory
(B) Electrically Programmable read write memory
(C) Electrically Programmable read-only memory
(D) None of these
165. Which bus is bidirectional? [JTO 2016]
(A) Address bus
(B) Control bus
(C) Data bus
(D) None of these
166. CD-ROM is a [Uttarakhand JTO LICe 2013]
(A) Semiconductor memory
(B) Memory register
(C) Magnetic memory
(D) None of these
167. A boot strap is [Uttarakhand JTO LICe 2013]
(A) A memory device
(B) A device to support the computer
(C) A small initialisation program to start up a computer
(D) None of these
168. Karanugh map (K-map) technique provides a systematic method for simplifying — [Uttarakhand JTO LICe 2013]
(A) Multiplexers
(B) Logic gates
(C) Boolean expressions
(D) None of the above
169. Status register is also called as — [Uttarakhand JTO LICe 2013]
(A) Accumulator
(B) Stack
(C) Counter
(D) Flags
170. What part of the Operating system (OS) stores utilities or frequently accessed functions? [Uttarakhand JTO LICe 2013]

- (A) Memory
 - (B) Registers
 - (C) Kernel
 - (D) None of these
171. The race around condition exists in J-K flip flop if; [Uttarakhand JTO LICe 2013]
- (A) $J = 0, K = 1$
 - (B) $J = 1, K = 0$
 - (C) $J = 0, K = 0$
 - (D) $J = 1, K = 1$
172. How many flip-flop circuits are needed to divide by 16? [Uttarakhand JTO LICe 2013]
- (A) 2
 - (B) 4
 - (C) 8
 - (D) 16
173. The principle of Locality of reference justifies the use of [LICE JTO(T) 2017-18]
- (A) Virtual memory
 - (B) Interrupts
 - (C) Cache memory
 - (D) Secondary memory
174. For certain very high speed search operation, which of the following memory should be used? [LICE JTO(T) 2017-18]
- (A) content addressable memory
 - (B) main memory
 - (C) magnetic memory
 - (D) None of these
175. What is the address space for a CPU having 16 pins reserved for generating an address? [LICE JTO(T) 2017-18]
- (A) 64 kB
 - (B) 65 bytes
 - (C) 64 bytes
 - (D) None of these
176. Which is not a part of the Execution Unit (EU)? [LICE JTO(T) 2017-18]
- (A) ALU
 - (B) Flags
 - (C) General purpose registers

(D) Clock

177. Which group of instructions do not affect the flags? [LICE JTO(T) 2017-18]

- (A) Arithmetic instructions
- (B) Data transfer instructions
- (C) Logical instructions
- (D) Branch instructions

178. In 8279, the size of built in FIFO RAM is [LICE JTO(T) 2017-18]

- (A) 8 bytes
- (B) 16 bytes
- (C) 20 bytes
- (D) 64 bytes

179. Which of the following processor does not supports memory management and protection mechanisms? [LICE JTO(T) 2017-18]

- (A) 80286
- (B) 8086
- (C) 80386
- (D) 80486

180. _____ is a multifunction PPI device that contains RAM Timer and I/O ports. [LICE JTO(T) 2017-18]

- (A) 8125
- (B) 8055
- (C) 8155
- (D) 8135

181. An assembler in a computer system prepares [JTO(T) LICE 2013 Kerala]

- (A) machine-language program from a symbolic language program
- (B) object program
- (C) assembles computer instructions and data in the machine
- (D) None of these

182. The following translates source programs into object programs [JTO(T) LICE 2013 Kerala]

- | | |
|-----------------|-----------------------|
| (A) Assembler | (C) Compiler |
| (B) Interpreter | (D) Absolute assemble |

183. A linker [JTO(T) LICE 2013 Kerala]

- (A) is a software program
- (B) combines part of a program

- (C) is a program used to load monitor into main memory
(D) Both (a) and (b)
184. The information about any array used in a table will be sorted in _____ **[JTO LICE 2014 Karnataka]**
(A) Symbol table
(B) Activation record
(C) System table
(D) Dope vector
185. Search tables used by compilers for efficient searching generally use **[JTO LICE 2014 Karnataka]**
(A) hash tables
(B) linear lists of records
(C) binary search tables
(D) binary search trees
186. Which algorithm is used to avoid dead lock **[JTO LICE 2013 Punjab]**
(A) Banker's algorithm
(B) Elevator algorithm
(C) Karn's Algorithm
(D) Nagle's algorithm
187. Which category of computer based information systems are concerned with supporting the functional areas of an organisation? **[Uttarakhand JTO LICE 2013]**
(A) Strategic information systems
(B) Business information systems
(C) Office automation systems
(D) Expert systems
188. Which of the following defines the scope of a system **[Uttarakhand JTO LICE 2013]**
(A) Feedback mechanism
(B) Environment
(C) process
(D) Boundary

1.2 Solutions

1. B. The symbols used in an assembly language are Mnemonics
2. B. DOS command used to see which serial ports are detected is MSD

3. B. Memories in which any location can be reached in a fixed (and short) amount of time after specifying its address is called Random access memory (RAM)
4. C. A microprocessor with 12 address lines is capable of addressing $2^{12} = 4096$ locations.
5. A. In I/O mapped systems input/output devices are identified using 8-bit port number
6. C. The circuit used in the interface point of an input port in a microprocessor is Tristate buffer
7. C. Ready Signal provides proper synchronization between microprocessor and slow devices such as memory, I/O devices etc.
8. D. Speed: In a 16-bit microprocessor clock frequency is 5 MHz whereas in an 8-bit microprocessor clock frequency is 3 MHz so the speed of the 16-bit microprocessor is high.
Directly addressable memory: In the case of 16-bit microprocessor = 2^{16} byte. In the case of 8-bit microprocessor = 2^8 byte. So in the case of directly addressable memory, 8-bit μp is limited to 16-bit μp .
Data - handling capacity: 16-bit microprocessors have 16 data lines so it can handle 16-bit data at a time whereas 8-bit microprocessors can handle only 8-bit data at a time.
Hence correct answer is all of these.
9. D. TRAP is both level and positive edge sensitive
10. B. port-A, port-B and port-C
11. B. 8086 microprocessor uses 20-bit address.
12. B. A hard disk is divided into tracks which are further subdivided into Sectors.
13. C. The tool used to test serial and parallel port is loop backs (wrap plugs)
14. B. A program that is employed in the development, repair or enhancement of other programs is known as Software tool
15. B. The DOS command is used to detect, diagnose and repair logical and physical disk errors on both, uncompressed and Double space compressed drive is SCAN-DISK
16. B. To avoid the race condition, the number of processes that may be simultaneously inside their critical section is 1
17. D. Thrashing can be caused by poor paging algorithms
18. B. A system program that sets up an executable program in main memory ready for execution is known as Loader
19. C. Fragmentation of the file system can be temporarily removed by compaction
20. D. Interprocess communication allows processes to synchronize activity
21. C. The devices that provide the means for a computer to communicate with the user or other computers are referred to as: I/O
22. A. The software used to drive microprocessor-based systems is called: assembly language
23. A. All computer programs for a machine are called software

24. C. The 8085A is an 8-bit parallel CPU
25. B. Because microprocessor CPUs do not understand mnemonics as they are, they have to be converted to binary machine code
26. D. A register in the microprocessor that keeps track of the answer or results of any arithmetic or logic operation is the: Accumulator
27. B. The number of buses connected as part of the 8085A microprocessor is 3
28. B. The register in a 8085A that is used to keep track of the memory address of the next op-code to run in the program is the: program counter
29. C. The part of computer that adds and compares data CPU chip
30. D. The registers used to keep track of address of the memory location is the Program counter
31. D. A complete microcomputer system consists of microprocessor, memory, and peripheral equipment
32. C. A stack is a set of memory locations in R/WM reserved for storing information temporarily during the execution of computer
33. A. A stack pointer is a 16-bit register in the microprocessor that indicates the beginning of the stack memory.
34. C. The branch logic that provides decision making capabilities in the control unit is known as unconditional transfer
35. D. Interrupts which are initiated by an instruction are software
36. B. A time sharing system implies more than one program in memory
37. C. The larger the RAM of a computer, the faster is its speed, since it eliminates frequency Disk I/Os.
38. C. The number of bits needed to address 4K memory is 12
39. B. In DOS the file contains commands that configure system devices is config.sys
40. A. RS-232 is a standard that applies to Serial ports
41. A. The bidirectional bus in 8086 is Data bus
42. C. The brain of any computer system is CPU
43. D. The technique of assigning a memory address to each I/O device in the computer system is called memory mapped I/O
44. A. To organize files in a disk, MS-DOS separates them into areas called directories
45. C. The tool used to test serial and parallel ports of a computer is loop backs (wrap plugs)
46. B. The co-processor signal given to 8086 (8386DX) is PEREQ
47. B. The highest priority interrupt in 8086 is Non maskable interrupt
48. A. The data bus of 8086 is 16 bit wide

49. D. In the given instruction for 8086, MOV AH,[BX][SI]+1234H , the addressing mode is Base index addressing mode
50. C. Initiation of DMA process is carried out by the issue of HOLD signal.
51. C. A translator which converts High Level Language to machine code is Compiler
52. D. The necessary condition for deadlock are Mutual exclusion, hold and wait, Circular wait and no preemption
53. D. Paging is a memory management scheme that enables
- (1) Permitting the physical address space of a process to be non-contiguous
 - (2) Avoiding external fragmentation and the need for compaction
54. D. A macro definition consists of macro prototype statement and one or more model statement Macro preprocessor statement.
55. A. In a Personal Computer the BIOS is stored in its ROM
56. A. The input units of a computer: feeds the data in CPU.
57. A. An example of a storage devices that can be carried around is Floppy disks
58. D. Computer software consists of:
- System program, Application program Operating System program
59. B. One Megabyte is equivalent to: 2^{20} bytes
60. B. An example of volatile memory: RAM
61. B. Intel 8086 is a 16 bit microprocessor
62. C. Six bytes means: 48 bits
63. A. A microprocessor contains: most of the control and arithmetic logic function of a computer
64. C. A 32 bit microprocessor has the word length: 4 bytes.
65. B. RAM stands for: Random Access Memory.
66. C. A bootstrap is: A small initialisation program to start up a computer.
67. D. Status register is also called as Flags
68. C. Kernel
69. B. In 8086 the overflow flag is set when Signed numbers go out of their range after an arithmetic operation
70. A. 8088 microprocessor differs with 8086 microprocessor in Data width on the output
71. D. In a 8086/8088 Microprocessor, the unit responsible for getting the instructions from memory and loading in the Queue is Bus Interface Unit
72. A. Cache is usually the First level of memory access by the microprocessor
73. A. The signal that causes the microprocessor to immediately terminate its present activity is RESET signal
74. D. The method bypasses the CPU for certain types of data transfer is Direct memory access (DMA)

75. B. The chip used for A/D and D/A converters in 8086 processor is 8255
76. B. The interrupt service request is serviced after the execution of the current instruction is completed
77. D. The number of chips required to realize $8K \times 8$ RAM using $8K \times 1$ RAM is 8
78. B. In microprocessors architecture, flag indicates the internal status of the CPU
79. C. The interrupt input of 8085 which has the highest priority is TRAP
80. B. The advantage of the parallel data communication over the serial data communication are large speed of transmission
81. A. The mnemonics used in writing a program is called assembly language
82. A. PASCAL, a structural programming language was developed by - Niklaus
83. D. MODEM is not a computer programming language
84. C. An operating system is a software program that enables the computer hardware to communicate and operate with the computer software
85. B. The bandwidth of an n-bit binary coded PCM signal for an original signal bandwidth of B Hz is nB Hz
86. C. The maximum integer which can be stored on a 8 bit accumulator is 255
87. A. An example of volatile memory in a computer is RAM
88. C. Data bus is bidirectional
89. C. The disk Interface standard Includes support for up to eight peripheral devices - SCSI
90. B. The file system does Windows 95 typically use is FAT32
91. A. CPU performance is measured through Throughput
92. D. An example of software which is not an operating system -Opera. Opera is a multi-platform web browser developed by its namesake company Opera.
93. B. A hard disk is divided into tracks which are further subdivided into sectors
94. B. A 25-pin female connector on the back of traditional desktop computer will typically be a parallel port
95. D. When a computer is switched on, the operating system is loaded on RAM
96. D. Application package software, or simply an application package, is a collection of software programs that have been developed for the purpose of being licensed to third-party organizations. An example of an application package is MS Office
97. D. The transfer rate of USB 2.0 is 480Mbps
98. B. SP stands for Stack pointer.
99. A. The external device is connected to a pin called the Interrupt pin on the processor chip.
100. A. In 8086 microprocessor, the highest priority among all type of interrupts-NMI
101. A. A dedicated processor that combines interface unit and DMA as one unit is Input-Output Processor

102. A. The signal represents synchronization signal decided by interprocess arbitration with a certain delay or signal DMA is BAL
103. A. The no. of wait states required to interface 8279 to 8086 with 8MHz clock are Two
104. C. The chip designed to automatically manage the handshake operations is 8255
105. C. The mode used for double handshake in 8255 is Mode 2
106. D. In ADC 0808 the output is enabled if OE pin is high
107. D. The Arithmetic and Logic Unit contains a number of high speed storage devices called registers
108. D. Direct memory access allows for the transfer of blocks of data from memory to an I/O device (or vice/versa) without using the CPU
109. C. The register which holds the address of the location to or from which data are to be transferred is called memory address register
110. A. The register used to keep track of address of the memory location where the next instruction is located is Program counter
111. D. The central processing unit after receiving an interrupt from an input/output device branches off to the interrupt service routine after completion of the current instruction
112. D. A processor will not be able to process interrupts if it is not enabled.
113. C. A memory system of size 16 Kbytes is required to be designed using memory chips which have 12 address lines and 4 data lines each. The number of such chips required to design the memory system is 8
- No:of address lines = 12
 No:of memory locations = 2^{12}
 No:of data line = 4 = no:of bits / location
 Total capacity = no:of chips * No:of memory locations * No:of data lines
 16 K B = no:of chips * 2^{12} * 4 bits
 No:of chips = 2^{14} bytes / $2^{12} * 4 / 8$ bytes = 8 chips
114. D. If $CS = A'_{15}A_{14}A_{13}$ is used as the chip select logic of a 4K RAM in an 8085 microprocessor system, then its memory range will be 6000 H - 6FFF H & 7000 H - 7FFF H
115. C.
- | | | | |
|------|------|----|------|
| 1000 | LXI | SP | 27FF |
| 1000 | CALL | | 1006 |
| 1006 | POP | H | |
- The contents of the stack pointer(SP) and the HL register pair on completion of execution of these instructions are SP = 27 FF, HL = 1006
116. B. The contents of Accumulator(A) and Register (B) of 8085 microprocessor are 3A H and 49 H respectively, The contents of A and the status carry flag(CY) and sign flag(S) after execution of SUB B instruction are A = F1, CY = 1, S = 1
117. A.
- | | | | |
|------|------|-----|--------|
| 2000 | LXI | SP, | 1000 H |
| 2003 | PUSH | H | |
| 2004 | PUSH | D | |
| 2005 | CALL | | 2050 |

newlinenewline 2008 POP H
2009 HIT

At the completion of execution of the program, the contents of the Program Counter and Stack Pointer of the microprocessor are respectively 2050 H and OFFC H

118. C. The part of the OS stores utility or frequently accessed functions is kernel
119. A. In DMA write operations the data is transferred From I/O to memory
120. A. The contents of the register AL after the following has been executed
Mov B1; 8C
Mov A1; 7E
Add A1; BL
is
OA and Carry Flag is set
121. C. Ready Pin of a microprocessor is used to introduce wait state
122. B. Hard Disk in the computer is Secondary Memory
123. B. One Mega Bits is equal to 2^{20} Bits
124. B. 8086 microprocessor is 16 Bit microprocessor
125. A. In DMA write operation the data is transferred from I/O to memory
126. A. In a Optical fiber, the propagation of signal happens due to the total internal reflection
127. C. Principle of Locality is used in Cache memory
128. B. In 8086 the overflow flag is set when Signed numbers go out of their range after an arithmetic operation
129. B. The 8279 normally provides a maximum of 16 seven segment display interface with CPU.
130. D. PROMs are used to spare relatively permanent information
131. A. Register variable stored in CPU
132. B. An OP code instructs the CPU
133. D. Every processor must necessarily have data bus, a control bus and an address bus
134. B. An instruction used to set the carry flag in a computer can be classified as arithmetic
135. C. Coaxial lines are coupled to the waveguides by means of either probes or coupling loops
136. A. The difference between memory and storage is that memory is temporary and storage is permanent.
137. D CD-ROM is a optical disk
138. C. Both Machine language and Assembly language are low level languages.
139. C. A communication device that combines transmissions from several I/O devices into one line is a multiplexer
140. A. Communication between a computer and a keyboard involves Simplex

141. C. The part of the Operating system(OS) stores utilities or frequently accessed function is Kernel
142. A. Voice over IP (Voice over Internet Protocol or "VoIP") technology converts voice calls from Analog to digital
143. D. CD-ROM is a Optical Disk
144. C. A bootstrap is: A small initialisation program to start up a computer
145. B. The functions of SS7 are Set up and tear down the call
146. A. Cache is usually the first-level of memory access by the microprocessor
147. A. The signal that causes the microprocessor to immediately terminate its present activity is RESET signal
148. D. FT - File Transfer is not a DNS resource record type
149. D. When an interrupt occurs in an operating system may change state of interrupted process to 'blocked' and schedule another process.
150. A.
151. The root directory of a disc should be placed Anywhere on the disc
152. B. Listing a software in a assembly language is preferred to writing in a high level language when Optimal use of the hardware resources available is of primary concern
153. D. The topology with higher reliability is Mesh topology
154. C. A memory of 8K means 8×1024
155. D. The registers is used to keep track of address of the memory location where the next instruction is located is Program Counter
156. B. Dedicated computer is Which is assigned one and only one task
157. B. EEPROM can be considered as most advanced ROM
158. A. User programs interact with I/O devices through Operating System.
159. C. A number system that uses only two digits, 0 and 1 is known as Binary system
160. D. ISP stands for Interrupt Service Procedure
161. A. An example of memory device is generally made of semi-conductors is RAM
162. B. The number of 128×8 RAM chips are needed to provide a memory capacity of 2048 bytes is 16
163. C. A CPU contains a control unit and an arithmetic logic unit
164. A. EPROM stands for Erasable Programmable read-only memory
165. C. Data bus is bidirectional.
166. D. CD-ROM is a optical disk.
167. C. A boot strap is A small initialisation program to start up a computer
168. C. Karanugh map (K-map) technique provides a systematic method for simplifying Boolean expressions

169. D. Status register is also called as Flags
170. C. The part of the Operating system (OS) stores utilities or frequently accessed functions? Kernel.
171. D. The race around condition exists in J-K flip flop if; $J = 1, K = 1$
172. B. The number of flip-flop circuits are needed to divide by 16 is 4
173. C. The principle of Locality of reference justifies the use of Cache memory
174. A. For certain very high speed search operation the memory should be content addressable memory
175. A. The address space for a CPU having 16 pins reserved for generating an address is 64 kB
176. D. The part which is not of the Execution Unit (EU) is Clock
177. B. The group of instructions do not affect the flags is Data transfer instructions
178. A. In 8279, the size of built in FIFO RAM is 8 bytes
179. B. 8086 does not support memory management and protection mechanisms?
180. C. A multifunction PPI device that contains RAM Timer and I/O ports - 8155
181. A. An assembler in a computer system prepares machine-language program from a symbolic language program.
182. C. Compiler
183. D. Both (a) and (b)
184. D. Dope vector
185. A. Search tables used by compilers for efficient searching generally use hash tables
186. A. Banker's algorithm
187. B. Business information systems
188. D. Boundary