

1. Program status word (PSW) contains various (different) status of
  - A> ALU
  - B> CU
  - C> CPU
  - D> Program
  
2. Microprogramming is designing of
  - A> ALU
  - B> CPU
  - C> ROM
  - D> CU
  
3. Instruction prefetch reduces the waiting time of
  - A> Memory
  - B> CPU
  - C> ALU
  - D> CU
  
4. Masking the interrupts means
  - A> Disable all interrupts
  - B> Disable I/O devices interrupts
  - C> Disable some interrupts
  - D> Disable all interrupts other than NMI
  
5. Bus arbitration is
  - A> Clearing the bus
  - B> Latching information in the bus
  - C> Deciding the controller of the bus
  - D> Controlling the memory management
  - E> None of the above
  
6. In a floppy, the track 0
  - A> Is the inner most track
  - B> Is the outer most track
  - C> Can be any where
  - D> Does not exist as track number starts from 1
  
7. Read/write head touches the disk in
  - A> Hard disk and floppy disk
  - B> Floppy disk only
  - C> Hard disk only
  - D> Neither in FD nor in HD
  
8. Radial cable is used to connect PC (CPU) and
  - A> Monitor
  - B> Printer
  - C> HDD
  - D> Keyboard
  
9. TURBO switch in PC is used to
  - A> Speed up operations of PC
  - B> Activate co-processor
  - C> Choose different clock speeds
  - D> Use cache memory
  
10. Speed of the computer depends on speed of
  - A> The clock (Frequency)
  - B> The CPU (microprocessor)
  - C> The CPU and memory
  - D> The CPU, memoy and peripherals

11. Control Memory Address Register (CMAR) is present in  
 A> ALU  
 B> Control unit  
 C> Outside control unit, inside the CPU  
 D> Instruction register
12. CRC (Cyclic redundancy check) is used in  
 A> Floppy disk drive (FDD) only  
 B> Hard disk drive (HDD) only  
 C> Both FDD and HDD  
 D> Neither in FDD nor in HDD
13. ECC (Error correction code) is used in  
 A> FDD only  
 B> HDD only  
 C> Both FDD and HDD  
 D> Neither in FDD nor in HDD
14. Stack is part of  
 A> CPU  
 B> RAM  
 C> Memory  
 D> Union of registers
15. DOS maintains  
 A> One stack  
 B> Two stacks  
 C> Three stacks  
 D> Four stacks
16. The interrupt numbers reserved by DOS for its own user  
 A> 0 h to 10 h  
 B> 10 h to 16 h  
 C> 20 h to 3F h  
 D> 18 h to 1F h
17. Associative memory is a  
 A> Very cheap memory  
 B> Pointer addressable memory  
 C> Content addressable memory  
 D> Slow memory
18. In software reset, memory checking is  
 A> Done as in hardware reset  
 B> Not done  
 C> Done in an overlapped fashion  
 D> Done partially
19. PSP is a/an  
 A> Instruction  
 B> Device  
 C> Control block in memory  
 D> Pointer in DOS area
20. Round robin is a  
 A> Kind of magnetic drum  
 B> Process scheduling policy  
 C> Process synchronization policy  
 D> Memory allocation policy
21. A floating point number is said to be normalized  
 A> Least significant bit of mantissa is zero  
 B> Most significant bit of mantissa is zero  
 C> Least significant bit of exponent is non zero  
 D> Most significant bit of exponent is zero
22. Overflow in signed numbers is detected by  
 A> Observing carry in to the sign bit position  
 B> Observing carry out of the sign bit position  
 C> (A) and (B) both  
 D> None of the above

23. For a number  $n$  (base  $r$ ) having  $n$  digits  $r$ 's complement is defined as  
 A>  $(r^n-1)-n$  C>  $(r^n+1)-n$   
 B>  $(r^n-1)+n$  D>  $r^n-n$
24. The ALU of a computer normally contains a number of high speed storage elements called  
 A> Semiconductor memory C> Hard Disk  
 B> Registers D> Magnetic disk
25. Which of the following is used as storage locations both in the ALU and the control section of a computer?  
 A> Accumulator C> Adder  
 B> Register D> Decoder
26. The following register is used as a working area in CPU  
 A> Program counter C> Instruction decoder  
 B> Instruction register D> Accumulator
27. Which of the following is responsible for coordinating various operating using timing signals  
 A> ALU C> Memory Unit  
 B> Control Unit D> I/O Unit
28. The function of address register (AR) holds  
 A> Temporary data C> Address for memory  
 B> Address for instruction D> Memory operand
29. The capacity of output register (OR) is  
 A> 16 bits B> 12 bits C> 32 bits D> 8 bits
30. The capacity of accumulator (AC) is  
 A> 16 bits B> 12 bits C> 32 bits D> 8 bits
31. The capacity of Instruction Pointer (IP) in PC-XT architecture is  
 A> 16 bits B> 8 bits C> 20 bits D> 32 bits
32. The function of program counter (PC) holds  
 A> Temporary data C> Memory operand  
 B> Address for memory D> Address for instruction
33. Memory refreshing may be done  
 A> By the CPU that contains a special regrest counter only  
 B> By an external refresh controller, only  
 C> Either by the CPU or by an external refresh controller  
 D> None of the above
34. When we move from the out most track to the inner most track in a magnetic disk, the density (bits/liner inch)  
 A> Increase  
 B> Decrease  
 C> Remains the same  
 D> Either remains constant or decrease

35. An opcode  
 A> Translates mnemonic  
 B> Instructs the CPU  
 C> Stores data  
 D> All of the above
36. Which of the following is a 16 bit microprocessor?  
 A> Motorola 6800  
 B> Intel 8085  
 C> Intel 8086  
 D> Zilog 80
37. .... introduce the first microprocessor  
 A> Fair child  
 B> Motorola  
 C> Intel  
 D> National semiconductors
38. A program that can be used repeatedly through out a major program is called  
 A> Template  
 B> Program module  
 C> Sub-routine  
 D> Loop
39. The disadvantage of dynamic RAM over static RAM is  
 A> Higher power consumption  
 B> Variable speed  
 C> Need to refresh the capacitor charge every once in two milliseconds  
 D> Higher bit density  
 E> None of the above
40. EPROM consists of  
 A> Bipolar transistor  
 B> Easily erasable  
 C> MOSFETs  
 D> Diodes  
 E> None of the above
41. The control unit of a microprocessor  
 A> Stores data in the memory  
 B> Access input data from a keyboard  
 C> Performs arithmetic and logic functions  
 D> All of the above  
 E> None of the above
42. One of the main features that distinguish microprocessor from micro computers is  
 A> Words are usually larger in microprocessor  
 B> Words are usually shorter in microprocessors  
 C> Microprocessor does not contain I/O devices  
 D> Exactly the same as the machine cycle time  
 E> None of the above
43. How many “Hamming code” bits are required for 16 bits of message  
 A> 4 bits  
 B> 5 bits  
 C> 6 bits  
 D> All of the above  
 E> None of the above
44. When the large amount of data are to be transferred then the ..... is used  
 A> Synchronous data transfer scheme  
 B> Asynchronous data transfer scheme

C> DMA data transfer scheme

D> None of the above

45. Burst mode of DMA data transfer and ..... are the two types of DMA data transfer scheme

A> Cycle techniques

B> Stealing techniques

C> Cycle stealing techniques

D> None of the above

46. Asynchronous means .....

A> At the fixed interval

B> At the irregular interval

C> At the fixed variable interval

D> None of the above

47. In the ..... technique, the speed of an I/O device does not match the speed of the microprocessor

A> Synchronous data transfer

B> Asynchronous data transfer

C> Interrupt driven data transfer

D> DMA data transfer

48. When I/O device becomes ready, it sends signal to the processor to indicate that it is ready such signals are called .....

A> +ve signal

B> Interrupt signal

C> Handshake signal

D> None of the above

49. Interrupts caused by I/O devices are called ..... interrupt

A> Software

B> Hardware

C> Priority

D> None of the above

50. An interrupt for which hardware automatically transfers the program to a specific memory location is known as .....

A> Software interrupt

B> Hardware interrupt

C> Maskable interrupts

D> Vector interrupt

**Answer Sheet for question no. TOTSOL-COA-01**

<b>1. C</b>	<b>6. B</b>	<b>11. B</b>	<b>16. C</b>	<b>21. B</b>	<b>26. D</b>	<b>31. A</b>	<b>36. C</b>	<b>41. E</b>	<b>46. B</b>
<b>2. D</b>	<b>7. D</b>	<b>12. C</b>	<b>17. C</b>	<b>22. C</b>	<b>27. B</b>	<b>32. D</b>	<b>37. C</b>	<b>42. C</b>	<b>47. A</b>
<b>3. B</b>	<b>8. D</b>	<b>13. C</b>	<b>18. B</b>	<b>23. D</b>	<b>28. C</b>	<b>33. B</b>	<b>38. C</b>	<b>43. B</b>	<b>48. B</b>
<b>4. C</b>	<b>9. C</b>	<b>14. B</b>	<b>19. C</b>	<b>24. B</b>	<b>29. D</b>	<b>34. A</b>	<b>39. C</b>	<b>44. C</b>	<b>49. C</b>
<b>5. C</b>	<b>10. C</b>	<b>15. C</b>	<b>20. B</b>	<b>25. B</b>	<b>30. A</b>	<b>35. B</b>	<b>40. C</b>	<b>45. C</b>	<b>50. D</b>