

1. A floppy is an  
(a) Input device (b) Output device  
(c) Input/Output device (d) none of these

2. ROM is  
(a) Hardware (b) Software  
(c) Firmware (d) Userware

3. Data inside CPU is stored in  
(a) Register (b) RAM  
(c) ROM (d) none of these

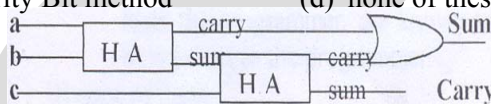
4. What is the maximum amount of memory a computer can address if it has 16 address lines and 16 data lines?  
(a) 64 KB (b) 128 KB  
(c) 1 MB (d) 16 M

5. What is the maximum number that can be stored in a 16 bit memory using normalized floating point representation, when 7 bits are reserved for exponent part?  
(a)  $2^{64}$  (b) Approximately  $2^{63}$   
(c) Exactly  $2^{63}$  (d)  $2^{(26-1)}$

6. How many films can be completely stored on a normal CD. Given each film is of 2-hour duration and 1 min of film requires 1 MB of storage?  
(a) 5 (b) 6  
(c) 4 (d) 3

7. What is the following code in C language doing?  
`for ( ; ; ) { }`  
(a) Infinite loop (b) Skip to next  
(c) Syntax error (d) none of these

8. Which of the following error detecting code is used in Hard disks?  
(a) RLE (b) CRC

- (c) Parity Bit method (d) none of these  
9. 

If H.A represents the circuit of Half Adder, What does the following circuit represents.

- (a) Computers  $a + b - c$   
(b) Full Adder  
(c) Full Adder if Sum and Carry at final stage are interchanged.  
(d) Can't be computed

10. What will be the output of the following C language program?

```
main ( ) { int i = 4;
switch ( i )
{ default: printf("Inside default");
case 1: printf("Inside first"); break;
case 2: printf("Inside second"); break;
case 3: printf("Inside third");
}}
```

- (a) Error, default should be the last case.  
(b) Error, there can't be more than one statement per line.  
(c) "Inside default", will be printed.  
(d) none of these

11. What will be the value of j after the execution of following code in C language?

```
int i = 10, j = 4;
i = i + ( j++ );
if ( i >= 15 )
j = j + i++;
else
j = ++i + j;
```

- (a) 21 (b) 16  
(c) 17 (d) 20

12. What will be the output of the C language program?

```

main ( )
{
int a,b,c,d = 8;
a = 0;
b = 1;
while (5)
{
c = a + b;
if (c <= d)
printf("%d",c);
a = b;
b = c;
else
break;
} }

```

- (a) 1 2 3 5 8 (b) 1 2 3 5  
(c) Error (d) Infinite loop

13. What will be the value of c after the loop is executed?

```

int a,c,d;
c = 0; d = 0;
scanf("%d",&a);
while(d!=a)
{
c = c + a;
d++;
}

```

- (a)  $a^2$  (b)  $a \cdot d$   
(c) indeterminate (d) none of these

14. Which of the following techniques is a hardware method to set priority of interrupts?

- (a) Device polling (b) Daisy chaining  
(c) DMA (d) none of these

15. A technique for serial data transfer is

- (a) Simplex method (b) Half duplex method  
(c) Full duplex method (d) All of these

16. The proportion of records accessed on a master file during update is known as

- (a) File organization (b) Hit rate  
(c) Seek time (d) Transfer rate

17. Which of the following is false?

- (a) An object program is produced by the compiler.  
(b) Branching, looping and logic testing are programming techniques.  
(c) A file is a collection of related records.  
(d) In CDROM the information is written by pressing the keys of QWERTY key board.

18. Microprogramming is a technique

- (a) for programming the microprocessors.  
(b) for writing small portions efficiently.

(c) for programming the control steps of a computer.

(d) for programming input/output.

19. Which of the following is false?

- (a) Access of ROM can be random.  
(b) Access time of the disk is the sum of Seek Time and Latency Time.  
(c) Hardware procedures, which are hidden from the programmer, are known as transparent to the programmer.  
(d) none of these

20. Which of the following is not a mode to address data in a computer?

- (a) Indirect (b) Relative  
(c) Based index (d) System index

21. If a floppy disk rotates at the rate of 300 rpm, what is the rate at which data is read from a track? Assume density of 1600 bits per inch.

- (a) 22000 bytes per sec.  
(b) 176000 bytes per sec.  
(c) 175 bits per sec.  
(d) 11000 bytes per sec.

22. Cycle Stealing is related to which of the following modes of data transfer?

- (a) Programmed Control  
(b) Interrupt data transfer  
(c) Direct Memory Access  
(d) none of these

23. If a hard disk has 10 surfaces, and each surface is 12 inch in diameter, and the density of recording is 60,000 bytes per linear inch. How many bits are stored per cylinder of the disk?

- (a)  $5625 \pi$  KB (b)  $2^{10}$  bytes  
(c)  $2^{10} \pi$  bytes (d) none of these

24. If a tape is recorded at 6240 bpi and there are 8 tracks on it, what is the capacity of a 32 ft. tape?

- (a) 2340 KB (b) 1024 KB  
(c) 2104 KB (d) none of these

25. The ascending order of a data hierarchy is:

- (a) bit-byte-record-field-file-database  
(b) bit-byte-field-record-file-database  
(c) bit-byte-field-record-database-file  
(d) bit-byte-record-field-database-file