Q. No. 1. Which one of the following is correct w.r.t control expression in switch statement?

  A: Only int can be used
  B: Both char and int can be used
  C: Any data type can be used
  D: Only void cannot be used

○ A ⦿ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 2. Which one of the following is correct w.r.t the usage of break and continue statements in C?

  A: break can be used in for, if and while statement body
  B: continue can be used only in for loop body
  C: break can be used only in for and if statement body
  D: break and continue can be used in for, while and do-while loop body. But only break can be used in switch body

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 3. Let y be an integer which can take a value of 0 or 1. The statement if(y==0) y=1; else y=0; is equivalent to which one of the following?

  A: y=1+y;
  B: y=1-y;
  C: y=y-1;
  D: y=1%y;

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 4. What is the meaning of the following declaration in C language?
  int (*d)[10];

  A: It will result in compile time error
  B: d is a pointer to an array of 10 integers
  C: d is pointer to integer array
  D: d is an array of 10 integer pointers

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 5. Which one of the following is the most appropriate way of using format specifiers in printf statement in order to print **float** a, **double** b and **long double** c in C language?

A: printf("%f %f %f",a,b,c)
B: printf("%f %ff %fff",a,b,c);
C: printf("%f %lf %Lf",a,b,c);
D: printf(%f %lf %llf",a,b,c);

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 6. What is the output of the following C program? Assume size of integer as 4 bytes and size of character as 1 byte.

```
union XYZ {
int a;
char b[8];
int c;
};
int main()
{
printf("%d",sizeof(union XYZ));
return(0);
}
```

A: 16
B: 12
C: 8
D: 32

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 7. Consider the following C program snippet.
unsigned x;
Which one of the following is correct?

A: Compile time error, as datatype is not mentioned
B: It accepts and takes int by default
C: It accepts and takes char by default
D: Runtime error

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 8. What is the output of the following C program?

```c
#include <stdio.h>
int *gatr;
int main()
{
  int * lbtr = NULL;
  if(gatr == lbtr)
  {
    printf("Equal!");
  }
  else
  {
    printf("Not Equal");
  }
  return 0;
}
```

A: It always prints Not Equal
B: It always prints Equal
C: Sometimes only it prints Equal
D: Compile time error, as pointers cannot be compared

A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 9. Consider the following C program snippet:
extern int data;
int edata;
Which one of the following is correct?

A: Both the above statements declare variables
B: Both the above statements define variables
C: First statement declares data and second statement defines edata
D: First statement defines data and second statement declares edata

A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 10.   What is the output of the following C program?

```
#include <stdio.h>
void fun(int ptr)
{
    ptr++ = 30;
}
int main()
{
    int y = 20;
    fun(y);
    printf("%d", y);
    return 0;
}
```

A: 20
B: 30
C: 31
D: Compile time Error

○A ○B ○C ○D | Clear Answer | | Mark For Review |

Q. No. 11.   Which one of the following is an operator in 'C'?

A: @
B: $
C: ,
D: @@

○A ○B ○C ○D | Clear Answer | | Mark For Review |

Q. No. 12.   The meaning of arrow operator in aptr->bm

A: aptr.(*bm)
B: (*aptr).bm
C: aptr.bm
D: (aptr*).bm

○A ○B ○C ○D | Clear Answer | | Mark For Review |

Q. No. 13.   What is the output of the following C program snippet?

```
int i=0x7+07+7;
printf("%x\n",i);
```

A: 21
B: 20
C: 15
D: 16

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 14.   What is the output of the following C code snippet?

```
int y[]={6,5,3,2,1,0};
printf("%d\n",5[y]*3);
```

A: Compile time error
B: 15
C: 45
D: 0

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 15.   What is the output of the following C code snippet?

```
int i=8;
while(i-=2) printf("%d ",i);
```

A: 8 6 4 2
B: 6 4 2
C: 8 6 4 2 0
D: 8 6 4

○ A ⊙ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 16.   _____ Operation removes an element from the stack.

A: push
B: pop
C: peep
D: peek

○ A ⊙ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 17. _____indicates pre-order traversal in a binary tree?

    A: Left sub-tree, Right sub-tree and root
    B: Right sub-tree, Left sub-tree and root
    C: Root, Left sub-tree, Right sub-tree
    D: Right sub-tree, root, Left sub-tree

○ A ○ B ● C ○ D | Clear Answer | | Mark For Review |

Q. No. 18.   In linked representation of stack, the null pointer of the last node in the list represents ....

    A: Beginning of the stack
    B: Bottom of the stack
    C: Middle of the stack
    D: In between some value

● A ○ B ○ C ○ D | Clear Answer | | Mark For Review |

Q. No. 19.   What is the time complexity of merge sort?

    A: $O(n)$
    B: $O(n^2)$
    C: $O(nlogn)$
    D: $O(logn)$

○ A ○ B ○ C ● D | Clear Answer | | Mark For Review |

Q. No. 20.   Pick up the wrong statement for calculating degree of a node in a graph is _____

    A: For every regular edge on a vertex is counted as 1
    B: For a self-loop it is counted as 2
    C: Sum of all the edges on a vertex
    D: Sum of all the edges in the graph

○ A ○ B ○ C ○ D | Clear Answer | | Mark For Review |

Q. No. 21.   Height of a node in a tree is

A: Level of the node
B: Number of hops from root to the node
C: Number of hops from the node to the leaf node in the longest path
D: Number of children

○A ○B ◉C ○D   Clear Answer   Mark For Review

Q. No. 22.   State true or false?
1. Binary search tree requires a sorted list
2. Linear search will take n^2 comparisons

A: True, True
B: True, False
C: False, True
D: False, False

○A ○B ○C ○D   Clear Answer   Mark For Review

Q. No. 23.   Which one of the following is not an important feature of Object oriented programming language?

A: Polymorphism
B: Encapsulation
C: Inheritance
D: Parallelism

○A ○B ○C ◉D   Clear Answer   Mark For Review

Q. No. 24.   Placing data members in private section helps to provide

A: Encapsulation
B: Data hiding
C: Overloading
D: Abstraction

○A ◉B ○C ○D   Clear Answer   Mark For Review

Q. No. 25. _____ refer to the names of functions, variables, arrays, classes etc.,

A: Operators
B: Punctuators
C: Manipulators
D: Identifiers

○ A ○ B ○ C ⦿ D   Clear Answer   Mark For Review

Q. No. 26. Which one of the following is a valid constructor prototype in class ABC?

A: void ABC(int);
B: int ABC( );
C: ABC( );
D: void ABC(int,float);

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 27. Which one of the following operator can be overloaded only as member function in C++?

A: [ ]
B: *
C: <<
D: +=

○ A ○ B ⦿ C ○ D   Clear Answer   Mark For Review

Q. No. 28. Create a class titled Triangle with private non-static data fields named base and height. The Triangle class contains a public non-static function named displayArea() whose prototype is void Triangle::displayArea(). This function calculates area of triangle and displays the same. Which one of the following correctly invokes this member function over Triangle object?

A: Triangle tobj; tobj.displayArea();
B: Triangle tobj=displayArea();
C: Triangle tobj, *tptr=&tobj; tptr->displayArea();
D: Both A and C

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 29.   Which one of the following is relevant to exception handling in C++?

A: sizeof
B: try
C: virtual
D: template

○ A ◉ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 30.   What is the value of x after executing the following code?
int x=0,y=5;
x=10, y++, x +=y;

A: 10
B: 5
C: 16
D: 15

◉ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 31.   Which one of the following is true about this pointer?

A: It is passed as an implicit argument to all function calls
B: It is passed as an implicit argument to all non-static member function calls
C: It is passed as an implicit argument to all static member function calls
D: None of the above

○ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 32.   Flow control is carried out by TCP using _____ window
protocol.

A: limited-size
B: sliding
C: fixed-size
D: partial

○ A ◉ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 33.   ICMP is a _____ layer protocol.

    A: data link
    B: transport
    C: network
    D: application

○ A ○ B ◉ C ○ D   Clear Answer   Mark For Review

Q. No. 34.   _____ protocol is not desirable for real time streaming because it follows the policy of retransmission during errors.

    A: UDP
    B: TCP
    C: RIP
    D: SIP

○ A ◉ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 35.   This device has no filtering capability and just forwards the frames.

    A: router
    B: bridge
    C: hub
    D: repeater

○ A ◉ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 36.   In networking, the server uses _____ port and the client uses _____ port.

    A: a well-known, an ephemeral
    B: a well-known, a well-known
    C: an ephemeral, an ephemeral
    D: unknown, unknown

◉ A ○ B ○ C ○ D   Clear Answer   Mark For Review

Q. No. 37.   If two or more bits in the data unit have changed, what is that error referred to_____.

A: burst
B: double bit
C: single bit
D: erroneous bit

⦿A ○B ○C ○D   Clear Answer   Mark For Review

Q. No. 38.   The data rate of Gigabit Ethernet is _____Mbps.

A: 10,000
B: 1000
C: 100
D: 10

○A ○B ○C ○D   Clear Answer   Mark For Review

Q. No. 39.   _____is defined as a variation in the delay of received packets

A: Reliability
B: Delay
C: Jitter
D: Bandwidth

○A ○B ⦿C ○D   Clear Answer   Mark For Review

Q. No. 40.   _____ and _____ are the 2 services defined by the IEEE 802.11 standard for wireless LANs

A: ESS, SSS
B: BSS, ESS
C: BSS, ASS
D: BSS, DCF

○A ⦿B ○C ○D   Clear Answer   Mark For Review

Q. No. 41.   This access method requires that each station first listen to the medium before sending.

A: FDMA
B: CDMA
C: TDMA
D: CSMA

○ A ○ B ○ C ○ D | Clear Answer | | Mark For Review |

Q. No. 42.   One program that is running all the time is

A: Kernel
B: System program
C: Application program
D: User program

◉ A ○ B ○ C ○ D | Clear Answer | | Mark For Review |

Q. No. 43.   In which state, the process will be waiting to be assigned to a processor?

A: New
B: Running
C: Waiting
D: Ready

○ A ○ B ○ C ◉ D | Clear Answer | | Mark For Review |

Q. No. 44.   DMA is

A: Direct Machine Account
B: Direct Machine Access
C: Direct Memory Account
D: Direct Memory Access

○ A ○ B ○ C ◉ D | Clear Answer | | Mark For Review |

Q. No. 45. CPU generates _____ address.

A: Logical
B: Physical
C: Absolute
D: Sequential

⊙A ○B ○C ○D   Clear Answer   Mark For Review

Q. No. 46. State true or false
i. paging avoids External fragmentation
ii. physical memory into fixed-sized blocks called Frames

A: True, False
B: True, True
C: False, True
D: False, False

○A ⊙B ○C ○D   Clear Answer   Mark For Review

Q. No. 47. Switching the CPU to another process requires saving the state of the old process and loading the saved state of the new process is called

A: mode switch
B: process switch
C: context switch
D: CPU switch

○A ○B ⊙C ○D   Clear Answer   Mark For Review

Q. No. 48. Which of the following is not a Scheduling Algorithm Optimization Criteria?

A: Max CPU utilization
B: Max throughput
C: Max turnaround time
D: Min waiting time

○A ○B ⊙C ○D   Clear Answer   Mark For Review

Q. No. 49.   Semaphore is used for solving _____

A: wait & signal
B: deadlock
C: synchronization
D: priority

○ A ○ B ◉ C ○ D   Clear Answer   Mark For Review

Q. No. 50.   Bankers algorithm is used in handling situations related to

A: Fragmentation
B: Page fault
C: Dead lock
D: Context Switching

○ A ○ B ◉ C ○ D   Clear Answer   Mark For Review

http://www.youtube.com/OptimisiticEngineer