

Q. No. 1. Which one of the following format specifier is used to print unsigned integer?

- A: %ui
- ☒ B: %u
- C: %un
- D: %iu

☐ A ☒ B ☐ C ☐ D

Q. No. 2. What is the use of continue statement?

- A: breaks from loop
- B: breaks from switch statement
- ☒ C: Continues with next iteration of a loop
- D: Continues with statement after loop

☐ A ☐ B ☒ C ☐ D

Q. No. 3. What is the output of the following C code snippet?

```
char *ptr;  
char str[]="Hello";  
ptr=str; str++;  
printf("%c",ptr);
```

- A: l
- ☒ B: Compilation Error
- C: H
- D: E

☐ A ☐ B ☐ C ☐ D

Q. No. 4. What is the output of the following C code snippet?

```
int a=8,b=2;  
printf("%d\n",a<<b);
```

- ☒ A: 32
- B: 16
- C: 4
- D: 2

☐ A ☐ B ☐ C ☐ D

Q. No. 5. What is the output of the following C code snippet?

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

- A: 1
- ☒ B: 0
- C: 2
- D: Garbage value

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 6. What is the output of the following C code snippet?

```
int a;  
a='d'-'a';  
printf("%d\n",a);
```

- ☒ A: 3
- B: 100;
- C: 97
- D: Compilation error

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 7. Which symbol is used as a statement terminator in C?

- A: !
- B: #
- C: ~
- ☒ D: ;

☐ A ☐ B ☐ C ☒ D

Clear Answer

Mark For Review

Q. No. 8. What is the default return type of a C function?

- A: void
- ☒ B: int
- C: float
- D: char

☐ A ☒ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 9. In C language, continue statement cannot be used with_____.

- A: for
- B: while
- C: do while
- ☒ D: switch

☐ A ☐ B ☐ C ☒ D

Clear Answer

Mark For Review

Q. No. 10. Size of union in C language is_____.

- A: Combined size of all fields
- B: Size of smallest field
- ☒ C: Size of largest field
- D: Decided at runtime

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 11. What is the output of the following C program snippet?

```
int i=0x10+010+10;  
printf("%d\n",i);
```

- A: 30
- B: 2010
- C: 21
- D: 34

18

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 12. Which one the following is false w.r.t memory layout of C program?

- A: Stack and Heap grow in opposite directions
- B: Heap is used for dynamic memory allocation
- C: Code segment contains executable instructions
- D: Data segment contains function call activation details

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 13. Which one of the following is false w.r.t to printing % using printf in C language?

- A: `printf("%%");`
- ☒ B: `printf("%");`
- C: `printf("%c", '%');`
- D: `printf("%s", "%");`

☐ A ☒ B ☐ C ☐ D

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

```
int main()
{
#define a 40
printf("%d", a+=2);
return(0);
}
```

$a = a + 2$
↓
2

- A: 40
- ☒ B: 42
- C: 8
- D: Compile time error

☐ A ☐ B ☒ C ☐ D

Q. No. 15. If p is an instance of a structure. Fields of structure instance are accessed through p using _____ operator

- A: &
- ☒ B: .
- C: ->
- D: *

☐ A ☐ B ☒ C ☐ D

☒ Q. No. 16. Find the wrong statement?

- A: Presumption for binary search is the sorted array
- B: Insertion sort is best when few elements are out of its location
- C: Merge sort time complexity is $O(n \log n)$
- D: There are 'n' swaps in Selection sort

☐ A ☐ B ☐ C ☒ D

Q. No. 17. Pick up the wrong statement about heap sort

- A: It is a full binary tree
- B: It is best implemented using arrays than linked list
- C: It follows order property
- D: After building the heap, the largest element will be at the root

☐ A ☐ B ☐ C ☐ D

Q. No. 18. Pick up the wrong statement about the height of a binary tree

- A: Height of a null sub-tree or tree is '-1'
- B: Height of any node is the longest path from the node to root
- C: The height of a tree is the height of its root
- D: Height of node is $\max(\text{height of left sub-tree}, \text{height of right sub-tree}) + 1$

☐ A ☐ B ☐ C ☐ D

Q. No. 19. Which of the following function is used to delete an element from the Queue?

- A: Enqueue
- B: Pop
- C: Dequeue
- D: Push

☐ A ☐ B ☐ C ☐ D

Q. No. 20. What is true about merge sort?

- A: It is greedy algorithm
- B: It requires two lists in sorted order
- C: Time complexity is $O(\log n)$
- D: Worst case complexity is $O(\log n)$

Q. No. 21. Access time of a binary search tree may go worse in terms of time complexity up to _____.

- A: $O(n^2)$
- B: $O(n \log n)$
- C: $O(n)$
- D: $O(1)$

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 22. Overflow condition for a circular queue of size 'n' with rear and front pointers is

- A: $\text{rear} == n-1 \ \&\& \ \text{front} == 0$
- B: $\text{front} != 0 \ \&\& \ \text{rear}+1 == \text{front}$
- C: $\text{rear} == 0 \ \&\& \ \text{front} == 0$
- D: $(\text{rear}+1) \% \text{size} == \text{front}$

Q. No. 23. When a try block contains code that might throw an exception, but no exception is thrown in a particular execution, then the program _____.

- A: terminates
- ☒ B: issues a warning
- C: continues with the code below catch blocks after executing code in try block
- D: uses a default catch block

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 24. In which case, it is mandatory to provide a destructor in a class?

- A: Almost in every class
- B: Class for which two or more than two objects will be created
- C: Class for which copy constructor is defined
- D: Class whose object are created dynamically

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 25. Which one of the following C++ operators cannot be overloaded using friend function?

- A: +=
- ☒ B: <<
- C: ->
- D: -

☐ A ☒ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 26. Virtual functions are used to achieve _____.

- ☒ A: Overloading
- B: Overriding
- C: Runtime binding
- D: Static binding

Q. No. 27. Which one of the following is not the property of constructor?

- ☒ A: They should be declared in the public section
- B: They can be overloaded
- C: They can be virtual
- D: They do not have return type

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 28. Genericity feature is supported in C++ using

- ☒ A: Inheritance
- B: Encapsulation
- C: Template functions and template classes
- D: Abstraction

☒ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 29. To which type of a class, RTTI can be applied?

- A: Encapsulation
- B: Polymorphic
- C: Derived
- D: Base

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 30. Assume a class XYZ with public static data member sdata. Xobj is an instance of XYZ, which of the following is correct way of accessing sdata?

- ☒ A: XYZ.sdata
- B: XYZ::sdata
- C: Both B and D
- D: Xobj.sdata

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 31. Which of the following is false for cin?

- A: It represents standard input device
- B: It is an object of input stream class
- ☒ C: Both A and B
- D: It is a predefined function

☐ A ☐ B ☒ C ☐ D

Clear Answer

Mark For Review

Q. No. 32. In FTP, the port ____ is used for the control connection and the port ____ for the data connection.

- A: 21 ; 22
- B: 21 ; 20
- C: 20 ; 21
- D: 22 ; 21

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 33. The typical range of Ephemeral ports is _____.

- A: 1 to 80
- B: 1 to 1024
- C: 80 to 1024
- D: 1024 to 65535

☐ A ☐ B ☐ C ☐ D

Q. No. 34. The services of _____ is used by DNS at well-known port 53

- A: TCP
- B: UDP
- C: SCTP
- D: TCP or UDP

☐ A ☐ B ☐ C ☐ D

Q. No. 35. Which field determines the lifetime of IPv6 datagram?

- A: Hop Limit
- B: TTL
- C: Next Header
- D: Fragmentation

☐ A ☐ B ☐ C ☐ D

Q. No. 36. _____ uses distance vector routing algorithm in Internet.

- A: OSPF
- B: ARP
- C: RIP
- D: RARP

☐ A ☐ B ☐ C ☐ D

Q. No. 37. The _____ address must be referred to deliver a message to the correct application program running on a host

- A: Port
- ☒ B: IP
- C: Physical
- D: Logical

☐ A ☒ B ☐ C ☐ D

Q. No. 38. _____ method is used by HTTP request line to request a document from the server.

- ☒ A: GET
- B: PUT
- C: COPY
- D: PUSH

☐ A ☒ B ☐ C ☐ D

Q. No. 39. Short Message Service is a message consisting of a maximum of _____ alphanumeric characters

- A: 100
- B: 150
- ☒ C: 160
- D: 170

☐ A ☐ B ☐ C ☒ D

☒ Q. No. 40. A mobile station can communicate with two base stations at the same time in a _____ handoff.

- A: Hard
- B: Soft
- C: Medium
- D: Moderate

Q. No. 41. A BSS with an AP in Wireless LAN is called _____ architecture.

- A: Ad-hoc architecture
- B: Infrastructure
- C: ESS
- D: NAV

☒ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 42. Pick up the wrong statement about I/O devices

- A: Each device controller is in charge of a particular device type
- B: All device controller has one common local buffer
- C: CPU moves data from/to main memory to/from local buffers
- D: I/O devices and the CPU can execute concurrently

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 43. If time quantum is very big in Round Robin CPU scheduling algorithm, then it acts as _____.

- ☒ A: SJF Scheduling
- B: FCFS Scheduling
- C: Priority Scheduling
- D: SJF with Preemption

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 44. Physical memory is divided into fixed sized _____

- A: Pages
- B: Frames
- C: Blocks
- ☒ D: Chunks

☐ A ☐ B ☐ C ☐ D

Clear Answer

Mark For Review

Q. No. 45. A file is a collection of _____.

- A: Sectors
- B: Blocks
- ☒ C: Records
- D: Tracks

☐ A ☐ B ☐ C ☒ D



Q. No. 46. The interval from the time of submission to the time of completion is known as _____.

- ☒ A: Throughput
- B: Turnaround time
- C: Waiting time
- D: Response time

☐ A ☐ B ☐ C ☒ D

Q. No. 47. Which of the following is not a optimization criteria for a scheduling algorithm?

- A: Maximum throughput
- ☒ B: Maximum turnaround time
- C: Minimum waiting time
- D: Minimum response time

- 1. CPU Utilization MAX: Range 0 to 100 %
- 2. Through put: MAX Process completed per unit time
- 3. Turn Around Time MIN: Time b/w Submission of process and time of Completion.
TAT= Execution time + Waiting time.
- 4. Waiting time MIN: Time spent by process in ready queue.
- 5 Response time MIN: Time for first response from CPU.

☐ A ☐ B ☐ C ☒ D

Q. No. 48. When interrupt occurs, state of running process is changed to _____

- ☒ A: Waiting state
- B: Ready state
- C: New state
- D: It will not go anywhere

Q. No. 49. TLB stands for

- A: translation look aside buffer
- B: translation look ahead buffer
- C: terminal large buffer
- D: transfer large buffer

☐ A ☐ B ☐ C ☐ D

Q. No. 50. I-node stands for _____

- A: interface node
- B: iterative node
- ☒ C: index node
- D: interconnection node

☐ A ☐ B ☐ C ☐ D

<http://www.youtube.com/OptimisiticEngineer>