QUIZIZZ **Worksheets**

Name

Brain Blitzz

Class

Total questions: 30

Worksheet time: 8mins

Date

Instructor name: Mr. Nithish Kumar

1. A man fixed an appointment to meet the manager, Manager asked him to come two days after the day before the day after tomorrow. Today is Friday. When will the manager expect him?

   a) Friday   b) Monday

   c) Tuesday   d) Sunday

2. If a and b are positive integers and (a-b)/3.5 = 4/7, then

   a) b< a   b) b > a

   c) b = a   d) b >= a

3. If 5 women or 8 girls can do a work in 84 days.
   In how many days can 10 women and 5 girls can do the same work?

   a) 31 days   b) 30 days

   c) 32 days   d) 33 days

4. In a group of cows and hens,
   the number of legs are 14 more than twice the number of heads.
   The number of cows is

   a) 5   b) 7

   c) 10   d) 12

5. Which of the following function sets first n characters of a string to a given character?

   a) strinit()   b) strnset()

   c) strset()   d) strcset()

6. The library function used to find the last occurrence of a character in a string is

   a) strnstr()

   b) laststr()

   c) strrchr()

   d) strstr()

7. Which one of the options given below refers to the degree (or arity) of a relation in relational database systems?

   a) Number of attributes of its relation schema.

   b) Number of tuples stored in the relation.

   c) Number of entries in the relation.

   d) Number of distinct domains of its relation schema.

8. Immunity of the external schemas (or application programs) to changes in the conceptual scheme is referred to as:

   a) Physical Data Independence

   b) Logical Data Independence

   c) Both (A) and (B)

   d) None of the above

9. What does a data dictionary will identify?

   a) Field name

   b) Field format

   c) Field types

   d) All of the above

10. The maximum length of an attribute of type text is

    a) 127

    b) 255

    c) 256

    d) It is a variable

11. Purpose of 'Foreign Key' in a table is to ensure

    a) Null Integrity

    b) Referential Integrity

    c) Domain Integrity

    d) Null and Domain Integrity

12. What is the output of the following code?

```
#include<stdio.h>
int recursive_sum(int n) {
if(n == 0) return 0;
return n + recursive_sum(n - 1); }
int main()
{
int n = 0;
int ans = recursive_sum(n);
printf("%d",ans);
return 0;
}
```

a) -1

b) 1

c) runtime error

d) 0

13.

How are String represented in memory in C?

a) An array of characters

b) The object of some classes

c) some as other primitive classes

d) *Linked List of characters*

14. What function is used to append a character at the back of a string in C++?

a) push_back()

b) append()

c) push()

d) insert()

15. Which of the following data structures finds its use in recursion?

a) Arrays

b) Stack

c) LinkedList

d) Queues

16. Which of the following sorting algorithms provide the best time complexity in the worst-case scenario?

a) Merge Sort

b) Quick Sort

c) Bubble Sort

d) Selection Sort

17. What is the best time complexity we can achieve to precompute all-pairs shortest paths in a weighted graph?

   a) O(n^3)   b) O(n^2)

   c) O(n)   d) O(n^4)

18. In a graph of n nodes and n edges, how many cycles will be present?

   a) Exactly 1   b) At most 1

   c) At most 2   d) Depends on the Graph

19. Which function best describe the concept of polymorphism in programming languages?

   a) Class member function   b) Virtual function

   c) Inline function   d) Undefined function

20. Which of the following definition is incorrect for polymorphism?

   a) Polymorphism helps in redefining the same functionality   b) Polymorphism concept is the feature of object-oriented programming (OOP)

   c) It always increases the overhead of function definition   d) Ease in the readability of the program

21. Which operator from the following can be used to illustrate the feature of polymorphism?

   a) Overloading <<   b) Overloading &&

   c) Overloading || d) Overloading +=

22. Under which pillar of OOPS do base case class and derived class relationships come ?

   a) Inheritance   b) Polymorphism

   c) Encapsulation   d) Abstraction

23. Which of the following functions can be inherited from the base class

   a) Destructor   b) Constructor

   c) Static   d) none

24. Identify the layer which provides service to the user.

a) Session layer   b) Presentation error

c) Application layer   d) Physical layer

25. Which of the following layer isn't present in the TCP/IP model but is included in the OSI model?

a) Network layer   b) Session layer

c) Application layer   d) Transport layer

26. What is the term used when the main server sends mail to another mail server?

a) FTP   b) SMTP

c) TCP/IP   d) MIME

27. UNIX is written in which language?

a) C#   b) C++

c) C   d) .NET

28. What is meant by ready state of a process?

a) When the process is scheduled to run after   b) When the process is currently using the CPU
   some execution

c) When the process is dependent of the   d) .
   execution time of some other process.   None of these

29. Consider the following program:
main()
{
if(fork()>0)
sleep(100);
}

a) infinite process   b) orphan process

c) zombie process   d) none

30. Semaphore is a ___ **and it helps to solve the problem of** _?

    a) atomic, critical section

    b) integer variable, memory error

    c) integer variable, critical section

    d) atomic, memory error

Answer Keys

1. b) Monday

2. a) b< a

3. c) 32 days

4. b) 7

5. b) strnset()

6. c) strrchr()

7. a) Number of attributes of its relation schema.

8. b) Logical Data Independence

9. d) All of the above

10. d) It is a variable

11. b) Referential Integrity

12. c) runtime error

13. a) An array of characters

14. a) push_back()

15. b) Stack

16. a) Merge Sort

17. a) O(n^3)

18. a) Exactly 1

19. c) Inline function

20. c) It always increases the overhead of function definition

21. a) Overloading <<

22. a) Inheritance

23. d) none

24. c) Application layer

25. b) Session layer

26. b) SMTP

27. c) C

28. d) . None of these

29. c) zombie process

30. c) integer variable, critical section