Operating System

1. Remote Procedure Calls are used :

   a) for communication between two processes remotely different from each other on the same system

   b) for communication between two processes on the same system

   c) for communication between two processes on separate systems

   d) None of the mentioned

2. To differentiate the many network services a system supports _____ are used.

   a) Variables   b) Sockets   c) Ports   d) Service names

3. RPC provides a(an) _____ on the client side, a separate one for each remote procedure.

   a) stub   b) identifier   c) name   d) process identifier

4. The stub :

   a) transmits the message to the server where the server side stub receives the message and invokes procedure on the server side

   b) packs the parameters into a form transmittable over the network

   c) locates the port on the server   d) all of the mentioned

5. To resolve the problem of data representation on different systems RPCs define

   a) machine dependent representation of data   b) machine representation of data

   c) machine-independent representation of data   d) none of the mentioned

6. The full form of RMI :

   a) Remote Memory Installation   b) Remote Memory Invocation

   c) Remote Method Installation   d) Remote Method Invocation

7. The remote method invocation :

   a) allows a process to invoke memory on a remote object

   b) allows a thread to invoke a method on a remote object

   c) allows a thread to invoke memory on a remote object

   d) allows a process to invoke a method on a remote object

8. A process that is based on IPC mechanism which executes on different systems and can communicate with other processes using message based communication, is called _____

   a) Local Procedure Call   b) Inter Process Communication

   c) Remote Procedure Call   d) Remote Machine Invocation

9. What is operating system?

   a) collection of programs that manages hardware resources

   b) system service provider to the application programs

   c) link to interface the hardware and application programs

   d) all of the mentioned

10. To access the services of operating system, the interface is provided by the

   a) System calls   b) API   c) Library   d) Assembly instructions

11. Which one of the following is not true?

   a) kernel is the program that constitutes the central core of the operating system

   b) kernel is the first part of operating system to load into memory during booting

   c) kernel is made of various modules which can not be loaded in running operating system

   d) kernel remains in the memory during the entire computer session

12. Which one of the following error will be handle by the operating system?

   a) power failure   b) lack of paper in printer   c) connection failure in the network

   d) all of the mentioned

13. The main function of the command interpreter is

   a) to get and execute the next user-specified command

   b) to provide the interface between the API and application program

   c) to handle the files in operating system d) none of the mentioned

14. By operating system, the resource management can be done via

   a) time division multiplexing   b) space division multiplexing

   c) both time and space division multiplexing   d) none of the mentioned

15. If a process fails, most operating system write the error information to a _____

   a) log file b) another running process   c) new file   d) none of the mentioned

16. Which facility dynamically adds probes to a running system, both in user processes and in the kernel?

   a) DTrace b) DLocate   c) DMap   d) DAdd

17. Which one of the following is not a real time operating system?

   a) VxWorks   b) Windows CE   c) RTLinux   d) Palm OS

18. The OS X has _____

a) monolithic kernel   b) hybrid kernel   c) microkernel d) monolithic kernel with modules

19. The systems which allows only one process execution at a time, are called

a) uniprogramming systems   b) uniprocessing systems   c) unitasking systems

d) none of the mentioned

20. In operating system, each process has its own

a) address space and global variables   b) open files

c) pending alarms, signals and signal handlers   d) all of the mentioned

21. In Unix, Which system call creates the new process?

a) fork   b) create   c) new   d) none of the mentioned

22. A process can be terminated due to

a) normal exit   b) fatal error   c) killed by another process   d) all of the mentioned

23. What is the ready state of a process?

a) when process is scheduled to run after some execution

b) when process is unable to run until some task has been completed

c) when process is using the CPU   d) none of the mentioned

24. What is interprocess communication?

a) communication within the process   b) communication between two process

c) communication between two threads of same process d) none of the mentioned

25. A set of processes is deadlock if

a) each process is blocked and will remain so forever   b) each process is terminated

c) all processes are trying to kill each other   d) none of the mentioned

26. A process stack does not contain

a) Function parameters   b) Local variables   c) Return addresses

d) PID of child process.

27. . Which system call returns the process identifier of a terminated child?

a) wait   b) exit   c) fork   d) get

28. The address of the next instruction to be executed by the current process is provided by the

   a) CPU registers   b) Program counter   c) Process stack

   d) Pipe Array and Array Operations

29. Which of these best describes an array?

   a) A data structure that shows a hierarchical behavior

   b) Container of objects of similar types   c) Container of objects of mixed types

   d) All of the mentioned

30. How do you initialize an array in C?

   a) int arr[3] = (1,2,3);   b) int arr(3) = {1,2,3};

   c) int arr[3] = {1,2,3};   d) int arr(3) = (1,2,3);

31. How do you instantiate an array in Java?

   a) int arr[] = new int(3);   b) int arr[];   c) int arr[] = new int[3];

   d) int arr() = new int(3);

32. Which of the following is a correct way to declare a multidimensional array in Java?

   a) int[][] arr;   b) int arr[][];   c) int []arr[];   d) All of the mentioned

33. What is the output of the following piece of code?

public class array

{

        public static void main(String args[])

        {

                int []arr = {1,2,3,4,5};

                System.out.println(arr[2]);

                System.out.println(arr[4]);

        }

}

a) 3 and 5   b) 5 and 3   c) 2 and 4   d) 4 and 2

34. What is the output of the following piece of code?

        public class array

{

        public static void main(String args[])

        {

```
        int []arr = {1,2,3,4,5};
        System.out.println(arr[5]);
    }
}
```

a) 4   b) 5   c) Array Index Out Of Bounds Exception   d) InavlidInputException

35. When does the Array Index Out Of Bounds Exception occur?

a) Compile-time   b) Run-time   c) Not an error   d) None of the mentioned

36. Which of the following concepts make extensive use of arrays?

a) Binary trees   b) Scheduling of processes   c) Caching   d) Spatial locality

37. What are the advantages of arrays?

a) Easier to store elements of same data type

b) Used to implement other data structures like stack and queue

c) Convenient way to represent matrices as a 2D array   d) All of the mentioned

38. What are the disadvantages of arrays?

a) We must know before hand how many elements will be there in the array

b) There are chances of wastage of memory space if elements inserted in an array are lesser than than the allocated size

c) Insertion and deletion becomes tedious   d) All of the mentioned

39. Assuming int is of 4bytes, what is the size of int arr[15];?

a) 15   b) 19   c) 11   d) 60

40. O(N)(linear time) is better than O(1) constant time.

C Programming– Arrays

41. O(N)(linear time) is better than O(1) constant time.

A. True B. False C. D.

42. For 'C' programming language

A. Constant expressions are evaluated at compile

B. String constants can be concatenated at compile time

C. Size of array should be known at compile time   D. All of these

4.What is the maximun number of dimensions an array in C may have?

A.Two

B.Eight

C.Twenty

D.The oratically no limit. The only practical limits are memory size and compilers

43. If x is an array of interger, then the value of &x[i] is same as

   A.   &x[i-1] + sizeof (int)   B.x + sizeof (int) * i   C. x+i   D. none of these

44: If S is an array of 80 characters, then the value assigned to S through the statement scanf("%s",S) with input 12345 would be

   A."12345"

   B.nothing since 12345 is an integer

   C.S is an illegal name for string

   D.%s cannot be used for reading in values of S

45: Size of the array need not be specified, when

   A.Initialization is a part of definition

   B.It is a declaratrion

   C.It is a formal parameter

   D.All of these

46: A one dimensional array A has indices 1....75.Each element is a string and takes up three memory words. The array is stored starting at location 1120 decimal. The starting address of A[49] is

   A.1167

   B.1164

   C.1264

   D.1169

47: Minimum number of interchange needed to convert the array

89,19,40,14,17,12,10,2,5,7,11,6,9,70,   into a heap with the maximum element at the root is

   A.0

   B.1

   C.2

   D.3

8: Which of the following is an illegal array definition?

   ⲁType COLOGNE:(LIME,PINE,MUSK,MENTHOL); var a:array[COLOGNE]of REAL;

   .

Ivar a:array[REAL]of REAL;

.

(var a:array['A'..'Z']of REAL;

.

Ivar a:array[BOOLEAN]of REAL;

.

1. Minimun number of comparison required to compute the largest and second largest element in array is

A.$n-[\log_2 n]-2$

B.$n+[\log_2 n-2]$

C.$\log_2 n$

D.None of these

Computer Networks - Data Communication & Network Security

50. Which of the following is possible in a token passing bus network ?

   A.in-service expansion

   B.unlimited number of stations

   C.both (a) and (b)

   D.unlimited distance

51: In networking terminology UTP means

   A.Unshielded Twisted pair

   B.Ubiquitious Teflon port

   C.Uniformly Terminating port

   D.Unshielded T-connector port

52: Simple network management protocol (SNMP) is implemented with a daughter board in

   A.the nodes

   B.the server

   C.the hubs

   D.a separate PC that manages the network

53. The amount of uncertainty in a system of symbol is called

   A.Bandwidth

   B.Entropy

C.Loss

D.Quantum

54.Working of the WAN generally involves

A.telephone lines

B.micro waves

C.satellites

D.All of these

55. a LAN by a cable and

A.modem

B.interface card

C.special wires

D.telephone lines

56. Modem is used in data trasmission. When was it involved and in which country ?

A.1963, USA

B.1965, Germany

C.1950, USA

D.1950, Japan

57. Fibre optics have maximum segment

A.500 m

B.200 m

C.100 m

D.2000 m

58. Twisted pair have maximum segment of

A.500 m

B.200 m

C.100 m

D.2000 m

59. coax have maximum segment of

A.500 m

B.200 m

C.100 m

D.700 m

1. MS WORD:

60. The minimum number of rows and columns in MS Word document is

A. 1 and 1   B. 2 and 1

C. 1 and 2   D. 2 and 2

61 . How many columns can you insert in a word document in maximum?

A. 40   B. 45

C. 50   D. 55

62 . What is the smallest and largest font size available in Font Size tool on formatting toolbar?

A. 8 and 72   B. 8 and 68

C. 6 and 72   D. 6 and 68

63 . A character that is raised and smaller above the baseline is known as

A. Raised   B. Outlined

C. Capscript   D. Superscript

64 . Selecting text means, selecting?

A. a word   B. an entire sentence

C. whole document   D. any of the above

65. MS-Word automatically moves the text to the next line when it reaches the right edge of the screen and is called?

A. Carriage Return   B. Enter

C. Word Wrap   D. None of the above

66 . Using Find command in Word, we can search?

A. characters

B. formats

C. symbols

D. All of the above

66 . In MS-Word, for what does ruler help?

A. to set tabs

B. to set indents

C.to change page margins

D.All of the above

67 . By default, on which page the header or the footer is printed?

A. on first page   B. on alternate page

C. on every page   D. none of the above

68 . Which menu in MSWord can be used to change character size and typeface?

A. View   B. Tools

C. Format   D. Data

Internet, Web & Email:

69 . Who is the father of Internet ?

A. Vint Cerf   B. Tim Berners Lee

C. Charles Babbage   D. None of these

70 . Who is the founder of the Internet?

A. Vint Cerf   B. Charles Babbage

C. Tim Berners-Lee   D. None of these

71 . Who invented world wide web ?

A. Tim Berners Lee   B. Sir Thomas

C. Charles Babbage   D. None of these

72 . Who is the father of email ?

A. Tim Berners Lee   B. Charles Babbage

C. Paul Buchheit   D. Ray Tomlinson

73 . Internet's initial development was supported by

A. Microsoft   B. ARPANET

C. Bill Rogers   D. Bill Gates

74 . World Wide Web was proposed by

A. Bill Rogers   B. ARPANET

C. Tim Berners-Lee   D. Bill Gates

75 . The internet also known simply as --------

A. NIT   B. NAT

C. NET   D. NFT

76 . Which of the following is an example of connectivity?

A. Internet   B. Power Card

C. Data   D. Floopy Disk

77 . -------- to transmit information on the World Wide Web.

A.   TPPH   B. HTTP

C.   HPTT   D. HTPT

78 . A web address is also called a --------

A. URL   B. ULR

C. RLU   D. LUR

79.The standard protocol of the Internet is

A. TCP/IP   B. C++

C. Java   D. HTML

Database Management System

80 . Usage of Preemption and Transaction Rollback prevents _____.

A.Deadlock situation

B.Data manipulation

C.Deadlock situation

D.Unauthorised usage of data file

81 . Views are useful for _____ unwanted information, and for collecting together information from more than one relation into a single view.

A. Deleting   B. Highlighting

C. Hiding   D. All of the above

82. The decision tree classifier is a widely used technique for _____.

A. Association   B. Classification

C. Clustering   D. Partition

83 . Cross_tab displays permit users to view _____ of multidimensional data at a time.

A. 1 − dimension   B. 2 − dimensions

C. 3 − dimensions

D. Multidimensions

84 . Thoma's-write rule is _____.

A.Sliding window protocol

B.One phase locking protocol

C.Two phase locking protocol

D.Time stamp ordering protocol

85 . Value that appears in one relation for a given set of attributes also appears for a certain set of attributes in another relation.

A.Domain Integrity

B.Data Integrity

C.Referential Integrity

D.Logical Integrity

86 . The SQL expression Select distinct T, branch_name from branch T, branch S where T.assets ‹ S.assets and S.branch_city= "Mumbai" finds the names of

All branches that have greater assets than all branches in Mumbai.

All branches that have greater assets than some branch located in Mumbai,

Any branch that has greater assets than any branch in Mumbai.

D.The branch that has greatest asset in Mumbai.

87. IEEE stands for _____

a) Instantaneous Electrical Engineering

b) Institute of Emerging Electrical Engineers

c) Institute of Emerging Electronic Engineers

d) Institute of Electrical and electronics engineers

88 . Find Incorrect match?

A.Create - DDL

B.Select - DML

C.Rectangle - DAL

D.Record - Relationship Mode

89 . Which of the following is true ?

A.BCNF and 3NF are same

B.A relation in BCNF is always in 3NF

C.A relation in BCNF is not in 3NF

D.A relation in 3NF is always in BCNF

C++ Programming

90 . A default catch block catches

A.all thrown objects

B.no thrown objects

C.any thrown object that has not been caught by an earlier catch block

D.all thrown objects that have been caught by an earlier catch block

91 . Format flags may be combined using

A.the bitwise OR operator (|)

B.the logical OR operator (||)

C.the bitwise AND operator (&)

D.the logical AND operator (&&)

92 . The use of the break statement in a switch statement is

A.optional

B.compulsory

C.not allowed. It gives an error message

D.to check an error

93 . To expose a data member to the program, you must declare the data member in the _____
section of the class

A. common   B. exposed

C. public   D. unrestricted

94 . Which of the following are valid characters for a numeric literal constant?

A.a comma

B.a dollar sign ($)

C.a percent sign (%)

D.None of the above

95 . A function that changes the state of the cout object is called a(n) _____

A.   member   B.   adjuster

C.   manipulator   D.   operator

96 . A C++ program contains a function with the header int function(double d, char c). Which of the following function headers could be used within the same program?

A.char function(double d, char c)

B.int function(int d, char c)

C.both (a) and (b)

D.neither (a) nor (b)

97 . When the compiler cannot differentiate between two overloaded constructors, they are called

A.   overloaded   B.   destructed

C.   ambiguous   D.   dubious

98 . If you design a class that needs special initialization tasks, you will want to design a(n) _____

A.housekeeping routine

B.initializer

C.constructor

D.compiler

99 . Which type of statement does not occur in computer programs?

A.   sequence   B.   loop

C.   denial   D.   selection

100.An electronic logic gate whose output is logic 0 only when all inputs are logic 1 is

A.   NOR

B.   NAND

C.   OR

D.   NOT

ANSWER

1.C   2.C   3.A   4.D   5.C   6.D   7.B   8.C   9.D   10.A   11.C   12.D   13.A

14.   15.A   16.A   17.D   18.B   19.B   20.D   21.A   22.D   23.A   24.B   25. A   26.D

27.A   28.B   29.B   30.C   31.C   32.D   33.A   34.C   35.B   36.D   37.D   38.D   39.D

40.B   41.D   42.D   43.A   44.A   45.A   46.C   47.C   48.B   49.B   50.A   51.A   52.C

53. B   54.D   55.B   56.C   57.D   58.C   59.A   60.A   61.B   62.A   63.D   64.A   65.C

66.D   67.C   68.C   69.A   70.C   71.A   72.D   73.B   74.A   75.C   76.A   77.B   78.A

79.A   80.A   81.C   82.B   83.B   84.D   85.C   86.B   87.D   88.C   89.B   90.C   91.A

92.A   93.C   94.D   95.C   96.B   97.C   98.C   99.C   100.B