**Q1: A modern electronic computer is a machine that is meant for**

A. Doing quick mathematical calculations

B. Input storage, manipulation of outputting of data

C. Electronic data processing

D. Performing repetitive tasks accurately

E. None of the others

**Q2: \_\_\_\_\_\_\_\_\_\_ means concealing the message by covering it with something else.**

A. Cryptography

B. Steganography

C. Compressing

D. Authentication

**Q3: In the attacks threatent integrity with \_\_\_\_\_\_\_\_\_ attack the attacker modifies the information to them**

A. Snooping

B. Repudiation

C. Denial of service

D. Traffic analysis

**Q4: The items are divided into two lists (sorted and unsorted) \_\_\_\_\_\_\_\_\_ sort.**

A. Only in a selection

B. Only in a bubble

C. Only in an insertion

D. In selection, bubble, or insertion

**Q5: \_\_\_\_\_\_\_\_ is a popular object-oriented language.**

A. FORTRAN

B. COBOL

C. Java

D. LISP

**Q6: Each row in a relation is called \_\_\_\_\_\_\_\_ .**

A. An attribute

B. A tuple

C. A union

D. An attitude

**Q7: In a \_\_\_\_\_\_\_\_\_\_ the project team needs to choose a language or a set of languages from among the procedural languages**

A. Analysis phase

B. Design phase

C. Implementation phase

D. Testing phase

**Q8: The \_\_\_\_\_\_\_\_\_ of ethics says an act is ethical if a majority of people in society agree with it.**

A. Moral rules

B. Social contract

C. Ultilization

D. Nonmaleficence

**Q9: What type of OS evolution that need for more speed and efficiency led to the design with multiple CPUS on the same machine?**

A. Personal systems

B. Distributed systems

C. Parallel systems

D. Real-time systems

**Q10: \_\_\_\_\_\_\_\_\_ explicitly defines connection establishment, data transfer, connection teardown phases to provide a connection-oriented service AND reliable protocol**

A. TCP

B. UDP

C. IP

D. HTTP

**Q11: What is statement that stores the value in the variable, which has already been created in the declaration section. We use the symbol ← in our algorithm to define it?**

A. Compound statement

B. Assignment statement

C. Control statement

D. None of above

**Q12: Arithmetic right shift is used to \_\_\_\_\_\_\_\_ an integer by two**

A. Addition

B. Subtraction

C. Divide

D. Multiply

**Q13: \_\_\_\_\_\_\_\_\_ is a collection of related elements possibly of different types having a single name**

A. Array

B. Record

C. Linked list

D. Tree

**Q14: Inside the ADT are two different parts of the model that are \_\_\_\_\_ and \_\_\_\_\_**

A. Data structure and operations

B. Application program and public operations

C. Application program and private operations

D. Data struture and application program

**Q15: A device that prints one character at a time is known as**

A. Laser printer

B. Line printer

C. Character printer

D. Dot-Matrix printer

E. None of the others

**Q16: A register in a CPU can hold \_\_\_\_\_\_\_\_\_ .**

A. Only data

B. Only instructions

C. Only program counter values

D. Data, instruction, or program counter values

**Q17: In the \_\_\_\_\_\_\_ we can think of a program as an active agent that manipulates passive objects.**

A. Procedural paradigm

B. Functional paradigm

C. Declarative paradigm

D. Object-oriented paradigm

**Q18: Conversion of binary number 1010101000010111 to hexadecimal number is \_\_\_\_\_\_\_**

A. D8F9

B. A8B9

C. AA17

D. D9F8

E. None of the others

**Q19: The term users in a DBMS has a broad meaning. We can divide users into:**

A. End users and database asministrators

B. End users and normal users

C. Application programs and end users

D. Application programs and database adminitrators

**Q20: In the data link layer, Standard Ethernet is \_\_\_\_\_\_\_**

A. 10 Mbps

B. 100 Mbps

C. 1 Gbps

D. 10 Gbps

Q21: Testing a software system can involve \_\_\_\_\_\_\_\_ testing.

A. Black-box

B. Glass-box

C. Neither black-box nor glass-box

D. Both black-box and glass-box

**Q22: A memory that does not change its contents without external causes is known as**

A. Dynamic memory

B. Static memory

C. RAM

D. EEPROM

E. None of the others

**Q23: The combination of sign and mantissa of a real number in IEEE standard floating point format is stored as an integer in the \_\_\_\_\_\_\_\_ representation.**

A. Unsigned

B. Sign-and-magnitude

C. Two's complement

D. One's complement

**Q24: The software used to convert source program instructions to object instruction is known as**

A. Compiler

B. Assembler

C. Interpreter

D. Language processor

E. None of the others

**Q25: In peripheral device management, what is the principle of hierarchical work on OS of third-generation computers?**

A. Processor - Peripheral device - Control device

B. Processor - Control device - Peripheral device

C. Control device - Peripheral device - Processor

D. None of the answers are correct

**Q26: In \_\_\_\_\_\_\_\_\_ cryptography, everyone has access to everyone's public key.**

A. Symmetric-key

B. Asymmetric-key

C. Secret-key

D. Private-key

**Q27: In the hierarchical database model, data is organized as an inverted \_\_\_\_\_\_\_ .**

A. Graph

B. Tree

C. Array

D. Record

**Q28: The \_\_\_\_\_\_\_ manager is responsible for archiving and backup.**

A. Memory

B. Process

C. Device

D. File

**Q29: What is quality referring to the ability to move software from one hardware platform to another**

A. Flexibility

B. Interoperability

C. Resusability

D. Changeability

**Q30: Which is a unit representing the no bits of discrete.**

A. Baud

B. Byte

C. Bit

D. All of the others

E. None of the others

**Q31: What is the name of the computer which was first used for programming and playing of music?**

A. ELLIAC

B. ENIAC

C. UNIVAC

D. All of the others

E. None of the others

**Q32: An index register that is automatically incremented or decremented with each use is**

A. Auto index

B. Asynchronous

C. Assembler

D. Compiler

E. None of the others

**Q33: The \_\_\_\_\_\_\_ construct uses a set of actions one after another.**

A. Sequence

B. Decision

C. Repetition

D. Flow

**Q34: The base of the binary number system is \_\_\_\_\_\_\_ .**

A. 2

B. 8

C. 10

D. 16

**Q35: The most important advantage of a video disk is \_\_\_\_\_\_\_ .**

A. Compactness

B. Potential capacity

C. Durability

D. Cost effectiveness

E. None of the others

**Q36: \_\_\_\_\_\_\_ is a measure of how tightly two modules are bound to each other.**

A. Modularity

B. Coupling

C. Interoperability

D. Cohesion

**Q37: In the \_\_\_\_\_\_\_\_ graphic method of representing an image in a computer, the image is decomposed into a combination of geometrical figures.**

A. Bitmap

B. Vector

C. Quantized

D. Binary

**Q38: Main memory is the second major subsystem in a computer. It consists of a collection of storage locations, each with a unique identifier, called an \_\_\_\_\_\_\_ ?**

A. Values

B. Address

C. Bit

D. Words

**Q39: A process in the ready state goes to the running state when \_\_\_\_\_\_\_ .**

A. It enters memory

B. It requests I/O

C. It gets access to the CPU

D. It finishes running

**Q40: \_\_\_\_\_\_\_\_ is a pictorial representation of an algorithm.**

A. A UML diagram

B. A program

C. Pseudocode

D. An algorithm

**Q41: In \_\_\_\_\_\_\_ paradigm, the service provider is an application program, it runs continuously, waiting for another application program, then to make a connection through the Internet and ask for service**

A. P2P

B. Traditional

C. Client-server

D. Model

**Q42: In a stream cipher encryption and decryption are done one symbol. We have a plaintext stream a ciphertext stream and a \_\_\_\_\_\_\_**

A. Key block

B. Single key

C. Key stream

D. Auto key

**Q43: In monoprogramming, most of the memory capacity is dedicated to a \_\_\_\_\_\_ if we consider the data to be processed by a program as part of the program.**

A. Single program

B. Multi program

C. Address location

D. Set of instruction

**Q44: How can we set name of nodes in a linked list?**

A. Depend on user

B. Name of the pointer

C. Implicit ones

D. Name of the head pointer

**Q45: There are several methods for handling address collisions and each of them \_\_\_\_\_\_ of the hashing algorithm?**

A. Independent

B. Dependent

C. Based on

D. Related

**Q46: Defining the users, requirements, and methods is part of the \_\_\_\_\_\_ phase.**

A. Analysis

B. Design

C. Implementation

D. Testing

**Q47: The \_\_\_\_\_\_\_\_ in the TCP/IP protocol suite is responsible for the host-to-host delivery of messages**

A. Physical

B. Data-link

C. Network

D. Transport

**Q48: If personal information about each employee in a company is stored in a file we can use \_\_\_\_\_\_\_ access to retrieve each record at the end of the month to print the paychecks**

A. Hashed file

B. Sequential file

C. EOF

D. Index file

**Q49: The attack that reduces the capability of a computer is called a \_\_\_\_\_\_\_ attack.**

A. Penetration

B. Denial of service

C. Either a or b

D. Neither a nor b

**Q50: A company's product or service is identified as a \_\_\_\_\_\_\_\_ .**

A. Trade mark

B. Trade secret

C. Patent

D. Copyright

**Q51: The operation that takes two relations and combines them based on common attributes is the \_\_\_\_\_\_\_\_\_ operation.**

A. Join

B. Project

C. Union

D. Intersection

**Q52: Where does a computer add and compare data?**

A. Hard disk

B. Floppy disk

C. CPU chip

D. Memory chip

E. None of the others

**Q53: An \_\_\_\_\_\_\_ of a binary search tree (BST) creates a list that is sorted in ascending order.**

A. Preorder traversal

B. Inorder traversal

C. Postorder traversal

D. Breadth-first traversal

**Q54: An indexed file consists of \_\_\_\_\_\_\_\_\_ .**

A. Only a sequential data file

B. Only an index

C. Only a random data file

D. An index and random data file

**Q55: Each node in a graph can have \_\_\_\_\_\_ parents.**

A. Only one

B. No node

C. One or more

D. At most two node

**Q56: The enqueue operation \_\_\_\_\_\_ an item at the \_\_\_\_\_\_ of the queue.**

A. Delete front

B. Delete end

C. Inserts front

D. Insert rear

**Q57: A mechanism for arranging controlled access to a shared resource is**

A. Retrieving

B. Sorting

C. Balleting

D. Lock-out

E. None of the others

**Q58: The octal equivalent of 1100101.001010 is \_\_\_\_\_\_\_\_**

A. 624.12

B. 145.12

C. 154.12

D. 145.21

E. None of the others

**Q59: RISC (reduced instruction set computer). The strategy behind RISC architecture is to have a small set of instructions that do a minimum number of \_\_\_\_\_\_\_**

A. Complex instructions

B. Complex operations

C. Simple operations

D. Simple instructions

**Q60: A data structure can be \_\_\_\_\_\_\_ .**

A. Only an array

B. Only a record

C. Only a linked list

D. An array, a record, or a linked list