1.   What is $1/10^{12}$ of a second?

Answer

Picosecond

2. What is $1/10^{15}$ of a second?

Answer

Femtosecond

3. A particular disk has a storage capacity of 30 gigabytes. Exactly how many bytes can the disk hold?

Answer

$30 \times 2^{30} = 32, 212, 254, 720$

4.   What does CPU stand for?What does CPU stand for?

Answer

Central processing unit

5.   Convert 38 base ten to it binary equivalent.

Answer

0100110

6.   Convert the binary number 010101 to its decimal equivalent.

Answer

21

7.   What is the octal representation of the base ten number 551?

Answer

1047_8

8.   What is the hexadecimal representation of the base ten number 4256?

Answer

$10A0_{16}$

9.   What is the two's complement representation of the integer -101?

Answer

10011011

Solution: 101_{10} is 01100101 in two's complement. Complement and add one yields 10011011.

10.   What points to the next instruction to fetch and execute?

Answer

The program counter

11.   What does RAM stand for?

Random access memory

12.   What is a hierarchical ordering based on natural relationships?

Answer

Taxonomy

13. What is the name of the program that translates a high-level language program to machine code?

Answer

Compiler

14. What is the name of the program that combines object files and library files so they can be produced as a unit?

Answer

Linker

15. What is the process of extracting the relevant properties of an object while ignoring the nonessential details.

Answer

Abstraction

16. What is the process of separating the asepects of an object into external and internal aspects.

Answer

Information hiding or encapsulation

17.   What is the process of dividing an object into smaller pieces or modules so that some goal is easier to obtain?

Answer

Modularity

18. What is the object-oriented property where a message can mean different things depending on the object receiving it.

Answer

Polymorphism