CSC103 Homework 1
(Due September 12, 2019, in class, 2 pages)

NAME:

(Questions 1-16) (32 pt.) Write your answer in the blank line next to each question.

_____ 1. Supercomputer is the fastest, most expensive, and most powerful type of computer. (T/F)

_____ 2. RAM is volatile. (T/F)

_____ 3. A smallest amount of space a file on a disk can take up is one cluster. (T/F)

_____ 4. Information is stored in the memory of a computer using the decimal numbering system. (T/F)

_____ 5. SpongeBob bought a 5GHz memory. (T/F)

_____ 6. Most digital cameras store photos on conventional floppy disks. (T/F)

_____ 7. Software is the physical parts of a computer system, such as the keyboard, monitor, printer, and so forth. (T/F)

_____ 8. A bus is a pathway, such as on the motherboard or inside the CPU, along which bits can be transferred. (T/F)

_____ 9. Four primary operations of a computer are input, processing, output, and storage. (T/F)

_____ 10. Machine cycle is fetch instruction, decode, execute, and store. (T/F)

_____ 11. $2^{30}$ bytes are in a gigabyte. (T/F)

_____ 12. External hardware components typically plug into connectors called adapters located on the exterior of the system unit. (T/F)

_____ 13. The binary number 1101 is equivalent to the decimal number 15. (T/F)

_____ 14. The binary number for the decimal number 101 is 1100101(2). (T/F)
15. The ________ generation of computers began when the transistor—a small device made of semiconductor material that acts like a switch to open or close electronic circuits—started to replace the vacuum tube.

a. first  

b. second  

c. third  

d. fourth

16. A __________ is the smallest colorable area in an electronic image.

a. bit  

b. dot  

c. dpi  

d. pixel

17. (2 pt.) ASCII code for “a” is 97. What is the ASCII code for “d”? 

18. (3 pt.) What is the name of the following phenomenon: Today’s CPUs contain hundreds of millions of transistors, and the number doubles approximately every 18 months?

19. (3 pt.) What is a programmable, electronic device that accepts data, performs operations on that data, presents the results, and can store the data or results as needed?