

Name: _____

Computer Memory Test (Out of 24 Marks)

1. In detail, explain why it is very important for today's computers to have as much memory as possible. What kind of enhancements does it bring to the speed of the computer, and why? (5)

2. a) In order, list the three levels of memory that the CPU tries to access when it needs data. (3)

1. _____
2. _____
3. _____

- b) Why is the permanent storage the "last resort" for the CPU? (2)

3. In today's RAM, data is stored in memory cells. How is a binary 1 or a binary 0 actually stored in each cell, and how does the computer know if there is a binary 1 or 0 stored in the cell? (4)

4. a) What are the two main factors which determine the performance of today's RAM? (2)

1. _____

2. _____

b) Which of these two performance factors has gotten steadily worse over the years? Give an example of how people have tried to improve the performance of the memory? (2)

c) In the future, which of the two main factors of performance do you think memory makers will focus on more? Why? (4)

d) Which performance factor do you think should be focused on more? Why? (2)
