

Question 1 (15 pts)

Circle True or False

- a) True False All programs must be brought into main memory before they can get executed.
- b) True or False When power is switched off, everything in the main memory is lost.
- c) True or False A bit is a binary digit, 0 or 1.
- d) True or False Compilers are programs that translate a program written in a high-level language into machine code, called object code.

Question 2 (25 pts)

What is displayed by this program?

```
#include <iostream>
using namespace std;
int main(){
    int i=9/4, j=5;
    double d=1.2;
    string s="QUIZ1";
    i++;
    j+=i*i;
    i=d;
    i=i%4/i;
    j-=i*j-i/i+j;
    cout << j << 5*2 << s << endl
         << "\t\"Hello\nBye";
    return 0;
}
```

Question 3 (30 pts)

Write a complete C++ program that prompts the user to enter three numbers. The program should then display the average of the square of the numbers.

Question 4 (30 pts)

Write a complete C++ program corresponding to this simulation. We suppose that a will never be 0 and b is positive.

SOLVING $ax+b=0$

Enter a and b: 2 3.4

The solution to $2x+3.4=0$ is -1.7