

NAME-SURNAME:

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1. Write down the number of the sentence in the the following paragraph which gives a wrong information regarding the for loop. **(20p)**

"**(I)** When the for statement begins executing, the control variable is set to its initial value if any. **(II)** Then, the loop-continuation condition is checked. **(III)** If the condition is satisfied, the statements within the body of the loop are executed. **(IV)** No matter the loop body contains a single or multiple statements, the body does not need to be surrounded by braces. **(V)** The control variable is then updated, and the loop begins again with the loop-continuation test. **(VI)** This process continues until the loop-continuation test fails. **(VII)** The program continues by performing the first statement after the body."

(IV)

2. Write down the number of the sentence in the the following paragraph which gives a wrong information regarding the following piece of code. **(20p)**

```
int main()
{
    int c;
    while ((c = getchar()) != EOF)
        putchar(c);
}
```

(I) The while gets a character from the keyboard. **(II)** It compares it to EOF, and assigns the result of the comparison to c. **(III)** If the test is true, the body of the while is executed, printing the character. **(IV)** The while then repeats. **(V)** When the test finally fails, the while terminates and so does main.

(II)

3. Translate the following sentence into Turkish language. **(20p)**

"What appears to be a character on the keyboard or screen is of course, like everything else, stored internally just as a bit pattern. The type char is specifically meant for storing such character data, but any integer type can be used."

Ekranada ya da klavye üzerinde bir karakter olarak gözüken şeyler, diğer herşey gibi, bilgisayarın içerisinde bir bit paterni olarak saklanır. char tipi, bu tür karakterleri saklamak için özel olarak tasarlanmıştır, fakat bu amaçla herhangi bir int tipi kullanılabilir.

4. Describe the functionality of the following piece of C code. **(20p)**

```
float var; printf("%.0f\n", var);
```

After declaring var as float, it prints its value without any digits after the decimal point.

5. Assuming var is an integer, describe the difference between the values of the C statements (I) $2*var/3$ and (II) $2/3*var$. **(20p)**

(II) always yields a result of 0 while (I) evaluates to a non-zero value as long as var is greater than or equal to 2.