Student Number: Answers **Name:** Solutions

Osmangazi University, Faculty of Engineering & Architecture 31.10.2006

Departments of Electrical & Computer Engineering "*Introduction to Programming*" 1st midterm

1. Evaluate the following conversions. (Subscripts : **d**ecimal, **h**exadecimal, **b**inary, **o**ctal).

a. $(300)_d$ = (100101100)$_b$

b. $(1110001110001100)_b$ = (E38C)$_h$

c. $(75)_h$ = (117)$_d$

d. $(9B4)_h$ = (4664)$_o$

2. Mark valid names with x. (Do not mark invalid ones)

- ☒ _16
- ☒ Else
- ☐ 27December
- ☐ October.29
- ☒ Terra___45
- ☒ longint
- ☐ C++
- ☐ A1=
- ☒ E_l_e_c_t_r_i_c
- ☐ d-float

3. Determine what is printed on the screen when the given code is executed.

a.
```
int A=1,B=1;
A+=++B - B++;
printf("%d %d",A,B);
```
```
1 3
```

b.
```
float A=1;
A+=2;
A*=A+A+(A=2);
printf("B=%6.2f",A);
```
```
B= 16.00
B= 12.00 (accept)
```

c.
```
int A=3;
A*=2; A|=30;
printf("%d",A&7);
```
```
6
```

d.
```
double A=3.14; int
B=3.14;
A=B=3;
if(2*(B/2)!=(int)A)
  printf("Not ");
printf("Equal");
```
```
Not Equal
```

4. Write down the body of function `foo()` in order to have the given output.

```
int main(void){
  int x=3,y=5;
  x=foo(x,y);
  printf("%d\n",x);
  x=foo(x,7);
  printf("%d\n",x);
  printf("%d\n",foo(0,-4));
  return 0;
}
/* the output is below */
```
```
5
7
0
```

```
int foo(int b,int c){
  return b>c?b:c;









}
```

Note: No books, notes, calculators etc. allowed. 45 minutes.