SUST
BMB 1st Term Test
Total: 20 Time: 30min
Date: 6-1-16

3*2 = 6

Q1 a) Prove $x + \bar{x}y = x + y$ 3

b) Simplify $\left(\overline{A+B+\bar{C}}\right)\bar{B}$ $\bar{A}B\bar{C}$

Q2. If `int i, j;` and `float f;` is the following relation is possible? 2

Why or why not ?

```
j = ((int) f) + i ;
```

What type of operators are used here ? 1.5

Q3. Convert 1010_{10} to binary, octal and Hexadecimal. 3

Q4. If

```
int   i = 8 , J = 5 ;
float x = 0.005 , Y = -0.01 ;
char  c = 'c' , d = 'd' ;
```

determine the value of each expression. 3

a) `!(c==99)`

b) `i -= (j > 0) ? i/j : 0`

c) `(i-3)*j) % (c+2*d) / (x-Y)`

25 % 10100

Q5. Give an example of gets() and puts() ; 2

Q6 Subtract 1011 from 1001 using 1's complement. 2