Unit-II

2. The following c++ function accepts three value as three side of a triangle. The function returns an enumerated value that states whether the data correspond to no.

Triangle (NT) ,Equilateral (EQ) ,Isosceles (IS) or scalene (SC) Typedef enum (NT,EQ,IS,SC) Tr ;

```
Tr Triangle Type (int a, int b, int c)
  if (( (ca+b) <= c ) 11 ((6+c) < = a) 11 ((c+a) < = b)) return NT;
  if (a = = b) { if (b = = c) return E0; }
  alse (if ( b!=C) return SC;
   return IS;}
```

Define cyclomatic complicity . Derive a flow graph of the above function. compute cyclomatic complicity and apply basis path testing to develop test cases covering testing of all statements in the function. Execute the test cases showing input data combination ,expected result and actual result. 16

Or

2. (a) Suppose a program contains decision point ,.each of which has two branches. How many test cases are needed to perform path testing on such a program ? If there are M choices at each decision point , how many test cases are needed for path testing ? can the program struc ture reduce this number ? give an example to support your an swer. 10

(b) What is the difference between white and black box testing ? Is de termining test cases easier in black or white box testing ? Is it correct to claim that if white box testing is done properly, it will achieve close to 100% path coverage? 6

Unit-III

3. (a) What do you understand by ISO certification ? what are the require ments that a company must fulfill to get ISO 9000 certification. 8