

ASSIGNMENT – 1  
CLASS XII D  
SUBJECT – COMPUTER SCIENCE  
Topic –constructor destructor and Data File Handling

Q.1 Differentiate between a default and a parameterized constructor in context of class and object. Give suitable example in C++.

Q.2 Answer the questions (i) and (ii) after going through the following class

```
class Computer
{
char C_name[20];
char Config[100];
public:
Computer(Computer &obj);    // function1
~Computer();                //function 2
};
```

(i) Write the statement(s) which will invoke the function 1.

(ii) Name the specific feature of the class shown by function 2. Also write the time of its invoke.

**Ques3.**

(a) Observe the program segment given below carefully and fill the blanks marked statement 1 and statement 2 using seekg( ) and tellg( ) function for performing the required task.

```
#include<fstream.h>
class Employee
{int Eno;
char Ename[30];
public:
int Countrec( );    //Function to count the total number of records
};
int Employee:: Countrec( )
{
fstream File;
File.open("Emp.Dat",ios::binary||ios::in);
_____ // Statement 1
int Bytes = _____ // Statement 2
int count = Bytes/sizeof(Employee);
File.close( );
return count;
}
```

Q.4 Write a function in C++ to count and display the number of line starting with alphabet 'A' present in a text file "LINES.TXT".

Example: if the file LINES.TXT contains the following lines:

A boy is playing there.

There is a playground.

An aeroplane is in the sky.

Alphabets and numbers are allowed in the password.

Then the function should display the output as 3.

Q.5 Assuming the class Computer as follows:

```
Class computer
{
char chiptype[10];
int speed;
public:
void getdetails( )
{
gets(chiptype);
cin>>speed;
}
void showdetails( )
{
cout<<"Chip"<<chiptype<<"Speed="<<speed<<endl;
}
};
```

Write a function readfile() to read all the records present in an already existing binary file **“SHIP.DAT”** and display them on the screen, also count the number of records present in the file.