

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.