

ASSIGNMENT 1

TOPIC : File Handling

TYPE 1 QUESTION : (Statement write type questions)

Q1. Observe the program segment given below carefully and fill the blanks marked as Statement 1 and Statement 2 using seekp() and seekg() functions for performing the required task.

```
#include <fstream.h>
class Item
{
int Ino;char Item[20];
public:
//Function to search and display the content from a particular record number
void Search(int );
//Function to modify the content of a particular record number
void Modify(int);
};
void Item::Search(int RecNo)
{
fstream File;
File.open("STOCK.DAT",ios::binary|ios::in);
_____ //Statement 1
File.read((char*)this,sizeof(Item));
cout<<Ino<<"=="<<"<<Item<<endl;
File.close();
}
void Item::Modify(int RecNo)
{
fstream File;

File.open("STOCK.DAT",ios::binary|ios::in|ios::out);

cout>>Ino;cin.getline(Item,20);
_____ //Statement 2
File.write((char*)this,sizeof(Item));
File.close();
}
```

Q2. Observe the program segment given below carefully and fill the blanks marked as Statement 1 and Statement 2 using seekg() and tellg() functions for performing the required task.

```
#include <fstream.h>
```

```

class Employee
{
int Eno;char Ename[20];
public:
//Function to count the total number of records
int Countrec();
};
int Item::Countrec()
{
fstream File;
File.open("EMP.DAT",ios::binary|ios::in);
_____ //Statement 1
int Bytes = _____ //Statement 2
int Count = Bytes / sizeof(Item);
File.close();
return Count;
}

```

Q3. Write the command to place the file pointer at the 10th and 4th record starting position using seekp() or seekg() command. File object is 'file' and record name is 'STUDENT'.

Q4. Observe the program segment given below carefully and fill in the blanks marked as Statement 1 and Statement 2 using tellg () and skeep () functions for performing the required task.

```

#include <fstream. h>
class client
{
long Cno ; char Name [20], Email [30] ;
public :
//Function to allow user to enter the cno,Nme , Email
void Enter ( ) ;
// Function to allow user to enter (modify) Email
void modify ( ) ;
long ReturnCno( ) { return Cno ; }
};
void changeEmail ( )
{ Client C ;
fstream F ;
F. open ("INFO.DAT" , ios :: binary |ios :: in|ios :: out) ;

```

```
long Cnoc ; //Client's no. whose Email needs to be changed
cin >> Cnoc ;
while (F. read (( char*) &C, sizeof (C)))
{
if (Cnoc == C.Returncno( ))
{
C.Modify( ) ;
//Statement 1
int Pos = _____//To find the current position of
//file pointer
//statement 2
_____ //To move the file pointer to write
//the modified record back into the
//file for the desired cnoc
F.write ((char*) &C, sizeof(C));
}
}
F.close( ) ;
}
```

Q5. Observe the program segment given below carefully, and answer the question that follows:

```
class PracFile
{
intPracno;
char PracName[20];
int TimeTaken;
int Marks;
public:
// function to enter PracFile details
void EnterPrac( );
// function to display PracFile details
void ShowPrac( ):
// function to return TimeTaken
int RTime() {return TimeTaken;}
// function to assign Marks
void Assignmarks (int M)
{ Marks = M;}
};
void AllocateMarks( )
{ fstream File;

File.open("MARKS.DAT",ios::binary|ios::in|ios::out);
PracFile P;
int Record = 0;
while (File.read(( char*) &P, sizeof(P)))
{
if(P.RTime(>50)
P.Assignmarks(0)
else
```

```

P.Assignmarks(10)
_____ //statement 1
_____ //statement 2
Record ++ ;
}
File.close();
}

```

If the function AllocateMarks () is supposed to Allocate Marks for the records in the file MARKS.DAT based on their value of the member TimeTaken.

Write C++ statements for the statement 1 and statement 2, where, statement 1 is required to position the file write pointer to an appropriate place in the file and statement 2 is to perform the write operation with the modified record.

Q6. Observe the program segment given below carefully, and answer the question that follows:

```

class Book
{
int Book no;
char Book_name[20];
public:
//function to enter Book details
void enterdetails();
// function to display Book details
void showdetails();
//function to return Book_no
int Rbook_no () {return Book_no;}
};
void Modify(Book NEW)
{
fstream File;
File.open("BOOK.DAT",ios::binary|ios::in|ios::out);
Book OB;
int Recordsread = 0, Found = 0;
while (!Found && File.read((char*)&OB, sizeof (OB)))
{
Recordsread ++ ;
if (NEW.RBook_no() == OB.RBook_no())
{
_____ //Missing Statement
File.write((char*)&NEW, sizeof (NEW));
Found = 1;
}
else
File.write((char*)&OB, sizeof(OB));
}
if (! Found)
cout<<" Record for modification does not exist";
File.close();
}

```

}

If the function Modify() is supposed to modify a record in file BOOK.DAT with the values of Book NEW passed to its argument, write the appropriate statement for Missing Statement using seekp() or seekg(), whichever needed, in the above code that would write the modified record at its proper place.

Q7. Observe the program segment carefully and fill in the blanks marked as statement 1&2

```
#include<fstream.h>
class MATERIAL
{
int Mno;char Mname[25]; int qty;
public:
:
void ModifyQty();
};
void MATERIAL::ModifyQty()
{
Fstream File;
Fil.open("MATERIAL.DAT",ios::binary|ios::in|ios::out);
int Mpno;
cout<<"Materail no to modify Qty :"; cin>>Mpno;
while(Fil.read((char*)this,sizeof(MATERIAL)))
{
if(Mpno==Mno)
{
cout<<"Present Qty :" <<qty<<,endl;
cout<<"Changed Qty :"; cin>>qty;
int Position=_____ ; //(Statement 1)
_____ : //(Statement 2)
Fil.write((char * this,sizeof (MATERIAL)); // Re-writing the record
}
}
Fil.close();
}
```

Q8. Observe the program segment given below carefully, and answer the question that follows

```
class Candidate
{
long CId ; //Candidate's Id
char CName[20]; // Candidate's Name
float Marks; //Candidate's Marks
public :
void Enter() ;
void Display() ;
void MarksChange () ; // Function to change marks
long R_CId() { return CId ; }
```

```

};
void MarksUpdate ( long ID)
{ fstream File ;
File.open (“ CANDIDATE.DAT”, ios :: binary | ios :: in | ios :: out ) ;
Candidate C ;
int Record = 0 , Found = 0;

while ( ! Found && File . read ( ( char *) & C , sizeof ( C ) ) )
if ( Id == C.R_CId ( ) )
{ cout << “ Enter new marks” ;
C. MarkChange ( ) ;
_____ // Statement 1
_____ // Statement 2
Found = 1 ;
}
Record ++ ;
}i
f ( found == 1 ) cout << “ Record Updated “ ;
File. close ( ) ;
}

```

Write the Statement 1 to position the File pointer at the beginning of the Record for which the candidate's Id matches with the argument passed, and Statement 2 to write the updated Record at that position.

Q9. Observe the program segment given below carefully and fill the blanks marked in statement 1 using seekg() or seekp() functions for performing the required task.

```

#include<fstream.h>
class FILE
{ int Num;
char Name[30];
public:
void GO_Record(int); }; //function to read Nth record from the file
void FILE::GO_Record(int N)
{
FILE Rec;
Fstream File;
File.open(“STOCK”,ios::binary|ios::in);
_____ //statement 1
File.read((char*)&Rec,sizeof(Rec));
cout<<Rec.Num<<Rec.Name<<endl;
File.close();
}

```

Q10. Observe the program segment carefully and answer the question that follows:

```

class stock
{
int Ino, Qty; Char Item[20];
public:
void Enter() { cin>>Ino; gets(Item); cin>>Qty;}
}

```

```
void issue(int Q) { Qty+=Q;}
void Purchase(int Q) {Qty-=Q;}
int GetIno() { return Ino;}
};
void PurchaseItem(int Pino, int PQty)
{ fstream File;
File.open("stock.dat", ios::binary|ios::in|ios::out);
Stock s;
int success=0;
while(success== 0 && File.read((char *)&s,sizeof(s)))
{
If(Pino== ss.GetIno())
{
s.Purchase(PQty);
_____ // statement 1
_____ // statement 2
Success++;
}
}
if (success ==1)
cout<< "Purchase Updated"<<endl;
else
cout<< "Wrong Item No"<<endl;
File.close();
}
```