Source code:-

```
#include<iostream>
#include<conio.h>
using namespace std;
int count=0;
class Quiz1;
class Quiz
  string f_name;
  string 1_name;
  friend class Quiz1;
  public:
      void style1();
      void get_bio()
        cout<<"Enter your first and last name "<<endl;</pre>
        cin>>f_name>>l_name;
      void end_msg()
        cout<<"Congratulations!!!! "<<f_name<<" "<<l_name<<" you have successfully
completed the Quiz game!!!!"<<endl;
};
void Quiz :: style1()
{
  cout << R"(
                                          ____|
  )"<<endl;
class Questions
  char c1, c2, c3, c4, c5;
  public:
```

```
cout<<endl<<"\t 1. Wilting in plants occurs because of____"<<endl
         <<"\t a.) The blockage of phloem \t\t b.) The blockage of xylem"<<endl
         <<"\t c.) increased transpiration \t\t d.) Both a and b"<<endl;
         cout << "Choose the correct option: ";
         cin>>c1;
         if(c1 == 'b')
           count = count + 3;
           cout<<"You have selected the correct option!!!"<<endl;
           cout<<"Press Enter to continue!!!!!"<<endl;
         }
         else{
           cout << "Wrong option" << endl;
           cout<<"Press Enter to continue!!!!!"<<endl;
         getch();
         cout << endl << "\t 2. The xylem in plants are responsible for: "<< endl
         <<"\t a) transport of water \t\t b) transport of amino acids "<<endl
         <<"\t c) transport of food \t\t d) transport of oxygen "<<endl;
         cout << "Answer: ";
         cin>>c2;
         if(c2 == 'a')
           count = count + 3;
           cout << "You have selected the correct option!!!" << endl;
           cout<<"Press Enter to continue!!!!!"<<endl;
         }
         else{
             cout << "Wrong option" << endl;
             cout<<"Press Enter to continue!!!!!"<<endl;
         getch();
         cout << endl << "\t 3. In the eye donation, which part of the eye is transplanted from
the donor?"<<endl
         <<"\t a) Lens \t\t b) Retina "<<endl
         <<"\t c) Cornea \t\t d) The whole eye "<endl;
         cout << "Answer: ";
         cin>>c3;
         if(c3 == 'c')
           count = count + 3;
           cout<<"You have selected the correct option!!!"<<endl;
           cout<<"Press Enter to continue!!!!!"<<endl;
```

void sci_que()

```
}
         else{
             cout << "Wrong option" << endl;
             cout<<"Press Enter to continue!!!!!"<<endl;
         getch();
         cout<<endl<<"\t 4. A person having AB-group of blood can donate blood to a
person having"<<endl
         <<"\t a) AB-group \t\t b) B-group "<<endl
         <<"\t c) O-group \t\t d) A-group "<<endl;
         cout << "Answer: ";
         cin>>c4;
         if(c4 == 'a')
         {
           count = count + 3;
           cout<<"You have selected the correct option!!!"<<endl;
           cout << "Press Enter to continue!!!!!" << endl;
         }
         else{
             cout << "Wrong option" << endl;
             cout<<"Press Enter to continue!!!!!"<<endl;
         getch();
         cout<<endl<<"\t 5. The acid stored in batteries is:"<<endl
         <<"\t a) Nitric acid \t\t b) Sulphuric acid"<<endl
         <<"\t c) Hydrochloric acid \t\t d) Acetic acid"<<endl;
         cout << "Answer: ";
         cin>>c5;
         if(c5 == 'b')
         {
           count = count + 3;
           cout << "Great!!! You have completed the Quiz" << endl;
           cout<<endl<<"Your total score of Quiz is "<<count<<endl;</pre>
         }
         else{
             cout<<"Wrong option"<<endl;</pre>
             cout<<"Press Enter to continue!!!!!"<<endl;</pre>
         cout<<endl<<"Your total score of the Quiz is "<<count<<" outoff "<<15<<endl;
         getch();
      void gk_que();
      void oops_que();
      void c_que();
};
```

```
void Questions :: oops_que()
  cout<<endl<<"\t 1. Which of the following type of class allows only one object of it to be
created?"<<endl
  <="\t a) Virtual class \t\t b) Abstract class"<<endl
  <<"\t c) Singleton class\t\t d) Friend class"<<endl;</pre>
  cout << "Answer: ":
  cin>>c1;
  if(c1=='c')
     count = count + 3;
     cout<<"You have selected the correct option!!!"<<endl;
     cout << "Press Enter to continue!!!!!" << endl;
  }
  else
     cout<<"Wrong option"<<endl;</pre>
     cout<<"Press Enter to continue!!!!!"<<endl;
  getch();
  cout << endl << "\t 2. Which of the following is not a type of constructor?" << endl
  <<"\t a) Copy constructor \t\t b) Friend constructor"<<endl
  <="\t c) Default constructor \t d) Parameterized constructor"<<endl;
  cout << "Answer: ";
  cin>>c2;
  if(c2=='b')
  {
     count = count + 3;
     cout<<"You have selected the correct option!!!"<<endl;
     cout << "Press Enter to continue!!!!!" << endl;
  }
  else
     cout << "Wrong option" << endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  getch();
  cout << endl << "\t 3. Which of the following is not the member of class?" << endl
  <<"\t a) Static function \t\t b) Friend function"<<endl
  <<"\t c) Const function \t\t d) Virtual function"<<endl;
  cout<<"Answer : ";</pre>
  cin>>c3;
  if(c3=='b')
  {
```

```
count = count + 3;
     cout << "You have selected the correct option!!!" << endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  }
  else
     cout << "Wrong option" << endl;
     cout << "Press Enter to continue!!!!!" << endl;
  getch();
  cout<<endl<<"\t 4. Which of the following concepts means determining at runtime what
method to invoke?"<<endl
  <<"\t a) Data hiding \t\t b) Dynamic Typing"<<endl
  <<"\t c) Dynamic binding \t\t d) Dynamic loading"<<endl;
  cout<<"Answer: ";
  cin>>c4:
  if(c4=='a')
     count = count + 3;
     cout << "You have selected the correct option!!!" << endl;
     cout << "Press Enter to continue!!!!!" << endl;
  }
  else
     cout << "Wrong option" << endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  }
  getch();
  cout<<endl<<"\t 5. Which of the following term is used for a function defined inside a
class?"<<endl
  <<"\t a) Member Variable \t\t b) Member function"<<endl
  <="\t c) Class function \t\t d) Classic function" << endl;
  cout << "Answer: ";
  cin>>c5:
  if(c5=='b')
     count = count + 3;
     cout<<"You have selected the correct option!!!"<<endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  }
  else
     cout << "Wrong option" << endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  }
```

```
cout<<endl<<"Your total score of Quiz is "<<count<<" outoff "<<15<<endl;
  getch();
}
void Questions :: gk_que()
{
  cout<<endl<<"\t 1. Which state has the largest area?"<<endl
  <<"\t a) Maharashtra \t\t b) Madhya Pradesh"<<endl
  <<"\t c) Uttar Pradesh \t\t d) Rajasthan"<<endl;
  cout<<"Answer : ";</pre>
  cin>>c1;
  if(c1=='d')
  {
    count=count+3;
    cout<<"You have selected the correct option!!!"<<endl;
    cout<<"Press Enter to continue!!!!!"<<endl:
  }
  else
    cout<<"Wrong option"<<endl;</pre>
    cout<<"Press Enter to continue!!!!!"<<endl;
  getch();
  cout<<endl<<"\t 2. When India's national football team was established?"<<endl
  <<"\t a) 1937 \t\t b) 1938"<<endl
  <<"\t c) 1940 \t\t d) 1952"<endl;
  cout << "Answer: ";
  cin>>c2;
  if(c2=='a')
  {
    count=count+3;
    cout<<"You have selected the correct option!!!"<<endl;
    cout << "Press Enter to continue!!!!!" << endl;
  }
  else
    cout<<"Wrong option"<<endl;</pre>
     cout<<"Press Enter to continue!!!!!"<<endl;
  getch();
  cout<<endl<<"\t 3. The first newspaper published in India was ?"<<endl
  <<"\t a) The Hindu \t\t b) The Amrita Bazar Patrika"<<endl
  <<"\t c)The Bengal Gazette \t d) The Samachar Darpan"<<endl;
  cout<<"Answer : ";</pre>
```

```
cin>>c3;
if(c3=='c')
  count=count+3;
  cout<<"You have selected the correct option!!!"<<endl;
  cout << "Press Enter to continue!!!!!" << endl;
}
else
  cout << "Wrong option" << endl;
  cout<<"Press Enter to continue!!!!!"<<endl;
getch();
cout<<endl<<"\t 4. Who was the First Vice president of India?"<<endl
<<"\t a) Dr. Radhakrishnan \t\t b) Dr. Rajender Prasad"<<endl
<<"\t c) Vallabhhai Patel \t\t d) Dr. B. R. Ambedkar"<<endl;
cout << "Answer: ";
cin>>c4;
if(c4=='a')
{
  count=count+3;
  cout<<"You have selected the correct option!!!"<<endl;
  cout<<"Press Enter to continue!!!!!"<<endl:
}
else
   cout<<"Wrong option"<<endl;</pre>
  cout<<"Press Enter to continue!!!!!"<<endl;
getch();
cout<<endl<<"\t 5. Which is the smallest country in the world?"<<endl
<<"\t a) Vatican \t\t b) Italy"<<endl
<<"\t c) Spain \t\t d) Nepal"<<endl;
cout << "Answer: ";
cin>>c5;
if(c5=='a')
{
  count = count + 3;
  cout<<"Great!!!You have completed the Quiz"<<endl;
}
else
  cout << "Wrong option" << endl;
  cout<<"Press Enter to continue!!!!!"<<endl;</pre>
}
```

```
cout<<endl<<"Your total score of Quiz is "<<count<<" outoff "<<15<<endl;
  getch();
}
void Questions :: c_que()
  cout<<endl<<"\t 1. Who is the father of C language?"<<endl
  <<"\t a) Steve Jobs \t\t b) James Gosling"<<endl
  <<"\t c) Dennis Ritchie \t d) Rasmus Lerdorf"<<endl;
  cout<<"Answer : ";</pre>
  cin>>c1;
  if(c1=='c')
     count=count+3;
     cout<<"You have selected the correct option!!!"<<endl;
     cout<<"Press Enter to continue!!!!!"<<endl;</pre>
  }
  else
     cout<<"Wrong option"<<endl;</pre>
     cout<<"Press Enter to continue!!!!!"<<endl;</pre>
  getch();
  cout<<endl<<"\t 2. Which of the following is not a valid C variable name?"<<endl
  <<"\t a) int number; \t\t b) float rate;"<<endl
  <<"\t c) int variable_count; \t d) int $main;"<<endl;
  cout<<"Answer : ";</pre>
  cin>>c2;
  if(c2=='d')
     count=count+3;
     cout<<"You have selected the correct option!!!"<<endl;
    cout << "Press Enter to continue!!!!!" << endl;
  }
  else
     cout << "Wrong option" << endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  }
  getch();
```

```
<<"\t a) LowerCase letters \t\t b) UpperCase letters"<<endl
  <<"\t c) CamelCase letters \t\t d) None of the mentioned"<<endl;
  cout<<"Answer : ";</pre>
  cin>>c3;
  if(c3=='a')
     count=count+3;
     cout<<"You have selected the correct option!!!"<<endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  }
  else
     cout << "Wrong option" << endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  getch();
  cout<<endl<<"\t4. Extern int fun(); - The declaration indicates the presence of a global
function defined outside the current module or in another file."<<endl
  <<"\t a) True \t\t b) False"<<endl
  <<"\t c) Maybe \t\t d) None of the above"<<endl;
  cout<<"Answer : ";</pre>
  cin>>c4;
  if(c4=='d')
     count=count+3;
     cout<<"You have selected the correct option!!!"<<endl;
    cout<<"Press Enter to continue!!!!!"<<endl;
  }
  else
    cout<<"Wrong option"<<endl;</pre>
     cout<<"Press Enter to continue!!!!!"<<endl;
  }
  getch();
  cout<<endl<<"\t 5. Which of the following is not an operator in C?"<<endl
  <<"\t a) ,\t\t b) sizeof()"<endl
  <<"\t c) ~ \t\t d) None of the mentioned"<<endl;
  cout<<"Answer : ";</pre>
  cin>>c5;
  if(c5=='d')
  {
     count=count+3;
```

```
cout<<"You have selected the correct option!!!"<<endl;
     cout<<"Press Enter to continue!!!!!"<<endl;
  }
  else
    cout<<"Wrong option"<<endl;</pre>
    cout<<"Press Enter to continue!!!!!"<<endl;</pre>
  cout<<endl<<"Your total score of Quiz is "<<count<<" outoff "<<15<<endl;
  getch();
}
class Quiz1 : public Quiz{
                                   //Derived class
  public:
  void cal_marks()
    if(count==15)
       cout<<" You have scored full marks in Quiz!!!!!!"<<endl;</pre>
    if(count>=11 && count<=14)
       cout<<" You have scored good marks"<<endl;</pre>
     if(count>=7 && count<=10)
       cout<<" You have scored less marks , Better luck next time!!!"<<endl;</pre>
     if(count<7)
       cout<<"You have failed in the quiz"<<endl;
};
int main()
{
  Questions q1, q2, q3, q4;
  Quiz1 k;
  Quiz p;
  Quiz *pointer = &p;
  pointer-> style1();
  pointer-> get_bio();
  cout<<endl<<"\tEach Question carries 3 marks in this Quiz!!!"<<endl<<endl;
 char op;
```

```
label:
 cout << endl << "Choose your favorite subject from the options given below." << endl;
 cout<<"a) C++ "<<endl
    <<"b) Science "<<endl
    <<"c) General Knowledge "<<endl
    <<"d) C programming "<<endl;
    cout<<endl<<"Enter your option ";</pre>
    cin>>op;
    if(op=='a')
      cout<<" Good choice!! You have selected c++ Quiz"<<endl;
      q1.oops_que();
    if(op=='b')
      cout<<"Good choice!! You have selected Science Quiz"<<endl;</pre>
      q2.sci_que();
    if(op=='c')
      cout << "Good choice!! You have selected General Knowledge Quiz" << endl;
      q3.gk_que();
    if(op=='d')
      cout << "Good choice!! You have selected C programming Quiz" << endl;
      q4.c_que();
    }
    cout<<endl;
    k.cal_marks();
   string opinion;
   cout<<endl<<"Do you wanna try this fun game again for any other subject?
"<<"(Yes/No)"<<endl;
   cin>>opinion;
   if(opinion == "yes")
     count = 0;
     goto label;
   else{
      exit;
   }
   cout<<endl;
   pointer-> end_msg();
```

```
return 0;
```

This is a quiz game where you have to select your desired subject from the given options. Once you chose your favorite topic the game will ask you questions regarding that subject. There are 5 questions of each subject, containing 3 marks each. After completion of the quiz the game will ask you if you want to play the game for any other subject, if you chose yes then again it will give you the options for the subjects, if you chose no then the programme will exit!

```
Enter your first and last name

Giddhi Bhalekar

Each Question carries 3 marks in this Quiz!!

Choose your favorite subject from the options given below.

a) C++

b) Science
c) Scneral Znowledge
d) C programming

Enter your option a

Good choice!! You have selected c++ Quiz

1. Which of the following type of class sllows only one object of it to be created?

a) Virtual class
c) Singleton class
d) Friend class
C Sou have selected the correct option!!!

Press Enter to continue!!!!

2. Which of the following is not a type of constructor?

e) Copy constructor
b) Friend constructor
c) Default constructor
d) Parameterized constructor
```

```
Answer: C

Answer: S

Answer: S
```

```
c) General Knowledge
d) C programming

Enter your option b

Good choics!! You have selected Science Quiz

1. Wilting in plants occurs because of

a.) The blockage of phlosm
b.) The blockage of syles

c) increased transpiration
d.) Both a end b

Chooce the correct option : c

Wrong option

Press Enter to continue!!!!

2. The syles in plants are responsible for:
a) transport of water
b) transport of amino acids
c) transport of food
d) transport of oxygen

Answer : a

You have selected the correct option!!!

Frees Enter to continue!!!!

3. In the eye donation, which part of the eye is transplanted from the donor?
a) Lens
b) Retina

Cornea d) The whole eye

Answer: c

You have selected the correct option!!!

Frees Enter to continue!!!!

4. A person having AB-group of blood can donate blood to a person having
a) AB-group
c) O-group
d) A-group
Answer: c

O-group
d) A-group
Answer: c
```

```
The acid stored in batteries is:
         a) Nitric acid
c) Hydrochloric acid
                                                 b) Sulphuric acidd) Acetic acid
Answer : b
Great!!!You have completed the Quiz
Your total score of Quiz is 12
Your total score of the Quiz is 12 outoff 15
You have scored good marks
To you wanna try this fun game again for any other subject? (Yes/No)
Thoose your favorite subject from the options given below.
   Seneral Knowledge
   C programming
Enter your option c
Good choice!! You have selected General Knowledge Quiz
          1. Which state has the largest area?
          a) Maharashtra
c) Uttar Pradesh
                                                 b) Madhya Pradeshd) Rajasthan
Answer : b
Wrong option
Press Enter to continue!!!!!
          2. When India's national football team was established?
         a) 1937
c) 1940
                                      b) 1938d) 1952
```

```
Wrong option
Press Enter to continue!!!!!
             3. The first newspaper published in India was ?
            a) The Hindu
c)The Bengal Gazette
                                              b) The Amrita Bazar Patrika
d) The Samachar Darpan
 Answer I d
Wrong option
Press Enter to continue!!!!!
            4. Who was the First Vice president of India ?
a) Dr. Radhakrishnan b) Dr. Rajender Prasad
c) Vallabhhai Patel d) Dr. B. R. Ambedkar
Answer : b
Wrong option
Fress Enter to continue!!!!
            5. Which is the smallest country in the world ?
a) Vatican
b) Italy
c) Spain
d) Mepal
            c) Spain
 Sreat!!!You have completed the Quiz
Your total score of Quiz is 3 outoff 15
 You have failed in the quiz
 Do you wanna try this fun game again for any other subject? (Yes/No)
Choose your fevorite subject from the options given below. s1 C++
b) Science
c) General Enowledge
d) C programming
```

```
Enter your option d
Good choice!! You have selected C programming Quix

1. Who is the father of C language?

a) Steve Jobs
b) Jeans Sosling
c) Dennis Ritchie
d) Rassus Lerdorf
Answer! c
You have selected the correct option!!!

2. Which of the following is not a valid C variable name?
a) int number;
c) int variable_count;
d) int Sasin;
Answer: d
You have selected the correct option!!!

7. Which of the following is not a valid C variable name?
a) int variable_count;
d) int Sasin;
Answer: d
You have selected the correct option!!!

3. All keywords in C are in
a) LowerCase letters
b) UpperCase letters
a) LowerCase letters
d) Nome of the mentioned
Answer: c
Wrong option
Press Enter to continue!!!!

4. Extern int fun(); - Whe declaration indicates the presence of a global function defined outside the current module or in another file
a) True
b) False
c) Maybe
d) Nome of the above
Answer: a
Wrong option
Press Enter to continue!!!!

5. Which of the following is not an operator in C?
a) b) sizeof()
c) d) Nome of the mentioned
```

```
Answer of the correct option!!!

Press Enter to continue!!!!!

Your total score of Quiz is 9 outoff 15

You have scored less marks , Setter luck next time!!!

Do you wanna try this fun game again for any other subject? (Yes/No)

Congratulations!!!! Siddhi Bhalekar you have successfully completed the Quiz game!!!!

...Program finished with smit code 0

Press ENTER to exit console.
```