Question 1      [ 12 marks ]

```cpp
#include <iostream>
Using namespace std;
int main () {
    String emp_name, emp_id;
    int hour_worked;
    double pay;

    cout << "Enter Employee Name: ";
    cin >> emp_name;
    cout << "Enter Employee Id: ";
    cin >> emp_id;
    cout << "Enter Employee work hours";
    cin >> hour_worked;

    if (hour_worked <= 80){
        pay = hour_worked * 10.5;
    } else {
        pay = (hour_worked - 80)* 12;
        pay += 80 * 10.5;
    }

    cout << "Employee Name: " << emp_name << "\n"
        << "Employee Id: " << emp_id << "\n"
        << "Employee hours: " << hour_worked << "\n"
        << "Employee salary:" << pay << "\n" ;
}
```

(1) Basic structure of a c++ prog                    2 marks.

(2) Variable declaration                             2 marks.

(3) Inputs into program                              2 marks.

(4) Correct conditionsat                             2 marks.

(5) Correct arithmetic for corresponding             2 marks
    condition

(6) Display of results                               2 marks.

# Question 4 [total : 10 marks]

```cpp
#include <iostream>
using namespace std;
int main () {
    //initializing variables
    int total_even = 0;
    int sum = 0;
    int first = 1;
    int second = 2;

    while ( sum <= 200000 ){
        sum = first + second;
        first = second;
        second = sum;
        if ( sum % 2 == 0 {
            total_even += sum;
        }
    }

    cout << " The result is " << total_even;
    return 0;
}
```

(1) Basic C++ program structure        2 marks
(2) Variable initializing              1 mark
(3) Valid loop condition               2 marks
(4) fibonacci sequence operation       2 marks
(5) Even number check and addition     2 marks
(6) Display of results                 1 mark

Question 2    [6 marks

(i) Inheritance      2 marks
(ii) Abstraction     2 marks
(iii) Polymorphism   2 marks.


Question 3             [ 12 marks ]

(i) Basic C++ program structure                            2 marks
(ii) Variable declaration and initialization               2 marks.
(iii) Accepting Inputs                                      2 marks.
(iv) Valid loop condition                                   2 marks.
(v) Valid operation within loop                            2 marks.
(vi) Display of results                                     2 marks