

1. Please write down a program to calculate the sum of  
 $1+3+5+\dots+99.$  (10%)

2. What are the final results of the following program? (10%)

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```
#include <iostream.h>
#include <iomanip.h>
int main()
{
    for (int i = 1; i <= 9; i++)
    {
        for (int j = 2; j <= 9; j++)
            cout << j << '*' << i << '='
            << setw(2) << j * i << '\t';
        cout << endl;
    }
    cout << endl;
    return 0;
}
```

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3. Please use the given structure *Time* and subroutine *print\_time* to show 10:51:28am. (15%)

```
#include <iostream.h>
struct Time {
    int hour;
    int minute;
    int second;
};

void print_time( const Time & );
void main()
{
    Time current_time;
    // Insert your codes here *****/
    /***** */
}

void print_time( const Time &t )
{
    cout << ( (t.hour==0 || t.hour==12) ? 12 : (t.hour%12) )
        << ':' << ( (t.minute < 10) ? "0" : "" ) << t.minute
        << ':' << ( (t.second < 10) ? "0" : "" ) << t.second
        << ( t.hour < 12 ? " AM" : " PM") << endl;
}
```

4. Please define the following terms: (15%)

- a. PDA b. PC-133 c. eCommerce d. GPRS e. RAM and ROM

5. For C programming language, which of the following statements is legal? If not, please correct it. (20%)

- (a) if(a==b)printf("hello"); (b) if(a=b || a>b)printf("hello");
- (c) if(a&b) printf("hello"); (d) while(x++ <y){ x++ }
- (e) for(;i++){x+} (f) int x[10]; x[10]=5;
- (g) int \*y; int x; y=x; (h) int \*y; int x; y=\*x;

6. What is the initial value of the following pointer? (5%)

Char \*pointc;

7. Write a C program which will accept a series of numbers from the user and place them in an ordered array. (10%)

8. For HTML(Hyper Text Markup Language) tags, please explain how to use following tags: (15%)

- (a) <IMG> (b) <A> (c) <table>