

CHAPTER – 10 – FLOW OF CONTROL**I. Answer in brief (2 marks)**

1. What is a null statement and compound statement?
2. What is selection statement? write its types?
3. Correct the following code segment:

```
if (x=1)
p= 100;
else
p = 10;
```

4. What will be the output of the following code?

```
int year;
cin >> year;
if (year % 100 == 0)
if ( year % 400 == 0)
cout << "Leap";
else
cout << "Not Leap year";
```

If the input given is (i) 2000 (ii) 2003 (iii) 2010?

5. What is the output of the following code?

```
for (int i=2; i<=10 ; i+=2)
cout << i;
```

6. Write a for loop that displays the number from 21 to 30.
7. Write a while loop that displays numbers 2, 4, 6, 8.....20.
8. Compare an if and a ? : operator.

II. Answer in a brief(3 marks)

1. Convert the following if-else to a single conditional statement:

```
if (x >= 10)
a = m + 5;
else
a = m;
```

2. Rewrite the following code so that it is functional:

```
v = 5;
do;
{
total += v;
cout << total;
while v <= 10
```

3. Write a C++ program to print multiplication table of a given number.
4. Write the syntax and purpose of switch statement.
5. Write a short program to print following series:
(a) 1 4 7 10..... 40

III. Answer in a paragraph (5 marks)

1. Explain control statement with suitable example.
2. What is an entry control loop? Explain any one of the entry-controlled loop with suitable example.
3. Write a program to find the LCM and GCD of two numbers.
4. Write programs to find the sum of the following series:

(a) $x - \frac{x^2}{2!} + \frac{x^3}{3!} - \frac{x^4}{4!} + \frac{x^5}{5!} - \frac{x^6}{6!}$

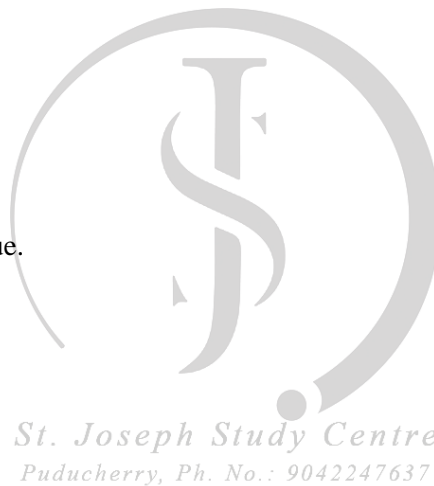
(b) $x + \frac{x^2}{2} + \frac{x^3}{3} + \dots + \frac{x^n}{n}$

5. Write a program to find sum of the series

$$S = 1 + x + x^2 + \dots + x^n$$

IV. Additional Questions (2/3 marks)

1. Difference between break and continue.
2. Explain conditional operator.
3. Explain about switch statement?
4. What is goto statement? explain?



V. Additional Questions (5 marks)

1. Explain looping? types of looping with example?
2. Explain switch statement with example?
3. Explain nested switch with example?