

Reg. Exam - Oct' 2019



**F.Y.BSc IT  
SEMESTER I  
IMPERATIVE PROGRAMMING**

1.10.19

TIME: 2 ½ HOURS

MARKS: 75

N.B: ALL QUESTIONS ARE COMPUSORY  
FIGURES TO THE RIGHT INDICATE FULL MARKS.

**Q.1 ANSWER THE FOLLOWING (ANY THREE):** **15**

- A) Draw a flowchart to calculate area of square.
- B) Draw a flowchart to calculate sum of even numbers between 10 and 100
- C) Write an algorithm to print numbers between 1 and 20.
- D) Write an algorithm to calculate perimeter of a triangle
- E) Describe the structure of C program
- F) Describe the symbolic constants in C

**Q.2 ANSWER THE FOLLOWING (ANY THREE):** **15**

- A) Explain the unary operator.
- B) Explain the relational Operator
- C) Explain the library function in C
- D) Explain the gets( ) function in C
- E) Describe the printf ( ) function in C
- F) Describe the getch( ) and getche( ) functions in C

**Q.3 ANSWER THE FOLLOWING (ANY THREE):** **15**

- A) Write a program in C to calculate the sum of following series using for loop:  
 $s = 5 + 10 + 15 + \dots + 200$
- B) Write a program in C to display the following using nested loop:

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

- C) Explain the switch case statement with the help of a program
- D) Explain difference between while and do..while loops with the help of program
- E) Describe the recursive functions in C with the help of an example
- F) Describe the call by value in C

**Q.4 ANSWER THE FOLLOWING (ANY THREE):** **15**

- A) Explain the register storage class in C with the help of a program
- B) Explain the static storage class in C with the help of a program
- C) Explain the concept of macros in C with the help of a program
- D) Write a program in C to sort an array in ascending order
- E) Write a program to add two matrices in C
- F) Describe strings in C

**Q.5 ANSWER THE FOLLOWING (ANY THREE):** **15**

- A) Explain the Unions in C
- B) Explain the pointers initialization in C with the help of an example
- C) Explain the pointers arithmetic in C with the help of an example
- D) Explain the concept passing function to other function
- E) Describe the structures in C
- F) Explain the how arrays can be accessed using pointers with help of program

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