

2018

**INTRODUCTION TO COMPUTER  
PROGRAMMING**

Paper : CS 101

Full Marks : 100

Time : Three hours

***The figures in the margin indicate  
full marks for the questions.***

***Answer any five questions.***

1. Discuss the following terms in short : 2×10=20

- (i) Computer Memory
- (ii) Computer Language
- (iii) Operating System
- (iv) Algorithm
- (v) Flowchart

*Contd..*

(vi) Variables & Constants in C

(vii) Structure & Union in C

(viii) Preprocessor in C

(ix) C-Loops

(x) Logical Operators in C.

2. (a) Write a C program to multiply two matrices. 10

(b) Write C program to display Fibonacci numbers upto 'n'. 10

3. (a) What is the difference between user defined function and library function? Write a user defined function to find factorial of a number passed from mainfunction. 2+8=10

(b) Write a C program to find sum of the following series: 10

$$S = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \dots + \frac{x^n}{n!}$$

4. (a) What are the control statements in C language? Describe. 10

(b) Demonstrate the use of pointer in C by using suitable example. 10

5. (a) Write a C program to input 10 students' details as 'structure' and display them. Structure fields (RollNo, Branch, Semester, Mark1, Mark2, Mark3, Total). 10

(b) Store some text in a file (file name "text.txt"). 10

Write a C program to read the file and count the numbers of characters present.

6. (a) Write a C program to find the numbers of digits present in an integer. 10

(b) Write a C program to find the largest of three numbers. 10