Code No. : C-195

## Annual Examination - 2018

## BCA-I

BCA-103
Paper-III
PROGRAMMING IN 'C' LANGUAGE
Max.Marks : 100
Time : 3 Hrs. Min Marks : 40
Note: Section 'A', containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

## Section-'A'

Very short answer type questions. Answer in one or two sentences.
Q. 1 What is constants and variables?
Q. 2 What is operator's precedence?
Q. 3 What is increment operator?
Q. 4 What is two dimension array?
Q. 5 Differentiate between call by value and call by reference.
Q. 6 What is structure? How to define it?
Q. 7 What is Union? Write an example.
Q. 8 What is void pointer?
Q. 9 What is preprocessor directives?
Q. 10 What is command line argument?

Section-'B'
Short answer type questions with word limit 150-200
$(6 \times 5=30)$
Q. 1 Explain formatted input/output function with different type of formatting character.

OR
Write a program to convert temperature from ${ }^{\circ} \mathrm{C}$ to ${ }^{\circ} \mathrm{F}$.
Q. 2 Write a program to Add two $3 \times 3$ matrix.

OR
Write a program to enter any string and check whether it is a palendrome or not.
Q. 3 What is Nested structures? Explain with example.

OR
What is union? How it is differ from structure? Explain with example.
Q. 4 How to pass function as argument to function? Explain with example.

OR
Write a program to swap two number using pointer.
Q. 5 How to open file in different mode? Explain with example.

OR
Write a file handling program to count number of character in a file.

## Section-' $\mathbf{C}^{\prime}$

Long answer type questions with word limit 300-350
$(10 \times 5=50)$
Q. $1 \quad$ Write a program to display prime number from 1 to 100 .

## OR

Write a program to input basic salary and print grass salary when following slabs are given :

| Basic | $\underline{\mathrm{TA}}$ | $\underline{\text { DA }}$ | $\underline{\text { HRA }}$ |
| :--- | :--- | :--- | :--- |
| $>=10000$ | $10 \%$ | $15 \%$ | $5 \%$ |
| $>=5000$ and $<10000$ | $5 \%$ | $10 \%$ | $2 \%$ |
| $<5000$ | $3 \%$ | $5 \%$ | Rs. 100 |

Q. 2 Write a program to enter any 10 number and arrange number in ascending order.

## OR

Write a program to multiply two $3 \times 3$ matrix.
Q. 3 What is structure within structure? Write a program to implement structure for handling student records.

OR
How to pass structure into function? Explain with suitable example.
Q. 4 What is pointer to pointer? Explain with suitable example.

OR
Write a program to enter any 10 number and find maximum number using pointer.
Q. 5 Describe fputc( ), fgetc( ), fprintf( ), fscanf( ),

OR
Write a program to implement conditional compilation directives.

