

**2018**

**BCA 1st Semester Examination**

**PROGRAMMING IN 'C'**

**PAPER—1102**

*Full Marks : 70*

*Time : 3 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

*Answer Q. No. 1 and any four from the rest.*

1. Attempt any *five* questions : 5×2
- (a) What is the use of "#define" in C ?
  - (b) What is static function in C ?
  - (c) What do you mean by type casting ?
  - (d) What is variable and keyword in C ?
  - (e) What is enum in C ?

*(Turn Over)*

- (f) What you mean by printf( ) ?
- (g) What is the use of macro ?
- (h) What do you mean by syntax error ?
2. (a) What is datatype ? What are primitive datatype in C language ? 2+1
- (b) Explain the output for the following piece of code :
- ```
int main ( )
{
    int * p ;
    P = (int *) malloc (size of (int)) ;
    *p = 10 ;
    return 0 ;
}
```
- 3
- (c) What do you mean by function prototype in clanguage ? Explain with suitable example. 2+2
- (d) What do you understand by the term "return type" of a function ? 3
- (e) What is the behavioral differance when include header file in double quotes (" ") and angular braces (< >) ? 2

3. (a) Explain the difference between function declaration and function definition with suitable example. 5
- (b) What do you mean by Flow chart? Explain with an example. 3
- (c) Define the term nested loop? Write down the difference between while and do while loop. 2+3
- (d) What is the relational operator in C language. 2
4. (a) Why C is called procedural language? 2
- (b) Explain the difference between global and local variable. 3
- (c) Explain the difference between assembler, compiler and interpreter. 5
- (d) Write a C program to calculate the length of the string using pointer (without using library function). 5
5. (a) Explain continue and break statement with an example. 3
- (b) Distinguish between structure and union in C language. 3
- (c) What is array? Why it is necessary to give the size of an array in array declaration? 1+2
- (d) Write a C program to find all roots of a quadratic equation. 6

6. (a) What do you mean by recursion in C language ? Explain with suitable example. 2+2
- (b) Explain call by reference and call by value with suitable example. 5
- (c) Explain the following string functions :  
strcat, strcmp, strlen. 3
- (d) Define pointer to an array and array of pointers with suitable example. 3
7. (a) What is file ? 1
- (b) What are the basic file operation in C language explain briefly. 2
- (c) Explain the following functions :  
fputc, fgets, fputs, fseek 4
- (d) Write a program in C to copy the contents of one file to another file. 6
- (e) What is file pointer ? 2
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