## Annual Examination, 2020

#### B.Sc. Part I

### COMPUTER SCIENCE

### Paper II

(Programming in C Language)

Time: 3 Hours ] [ MAXIMUM MARKS: 50

**Note**: Section 'A' is Objective type and is compulsory. It should be written on the **first page** of Answerbook. Section 'B' is Short answer type and Section 'C' is Long answer type.

### SECTION 'A'

## (Multiple Choice Questions)

Cho	oose the correct answer :	1×10=10
(i)	What is the size of an data type:	

- (a) 4 byte
- (b) 8 byte
- (c) Depends on compiler
- (d) Cannot be determined.
- (ii) Which of the following is not a logical or relational operator:
  - (a) !=

(b) ==

(c) |

(d) = .

```
(iii) What is the output of the following C code:
     #include<stdio.h>
     void main()
               int x=5;
               if (x < 1)
               printf("hello");
               if (x = 5)
          printf("hi")
     else
         printf("no");
     }
     (a) hi
                         (b) hello
     (c) no
                         (d) error.
(iv) A ..... is similar to ..... except fact
     that it is guaranteed to execute at least one
     time.
     (a) do while, while (b) while, do .... while
     (c) for, while
                         (d) do .... while, for.
(v)
    The value obtained in the function is given
    back to main by using .........
```

	(a)	return	(b) static	
	(c)	new	(d) volatile.	
(vi)	Wh	ich statement i	is right about the following	
	pointer declaration :			
int*ptr, p;				
	(a) ptr is a pointer to integer, p is not			
	(b) ptr and p both are pointers to integer			
	(c)	ptr is a pointe not be	er to integer, p may or may	
	(d)	ptr and p both	n are not pointer to integer.	
(vii)	Which string function returns the numbe			
	of characters in string :			
	(a)	strlength( )	(b) strlen()	
	(c) s	strlent()	(d) strchr().	
(viii) Collection of dissimilar data types called:				
	(a) array		(b) structure	
	(c) I	pointer	(d) None of the above.	
(ix)	fopen will return, if there is any error wh			
		ning a file :		
	(a)	Nothing	(b) EOF	
	(c) I	NULL	(d) depends on compiler.	

- (x) Comment on fputc():
  - (a) write a character into a file
  - (b) read a character from file
  - (c) write a line into a file
  - (d) read a line from file.

### SECTION 'B'

### (Short Answer Type Questions) 3×5=15

**Note:** Attempt **five** questions from this section by selecting one question from each question.

Answer within 100 words.

**1.** Write a 'C' code to demonstrate relational operator.

Or

Explain various unformatted I/O functions.

**2.** Write difference between while and do while loop.

Or

Describe library and user defined function.

**3.** What is array? Explain about its type.

Or

Write difference between structure and union.

G-11-20

**4.** What is pointer? Explain with C code.

Or

Describe pointer to pointer with example.

**5.** Write short note on file handling.

Or

Explain fgetc and fputc.

### SECTION 'C'

# (Long Answer Type Questions) 5×5=25

**Note:** Attempt **five** questions from this section by selecting one question from each question.

Answer within 300 words.

- **1.** Describe the following:
  - (a) Keywords
- (b) Tokens
- (c) Type casting
- (d) Variables
- (e) Constants.

Or

Describe various operators used in C.

**2.** Write a C program to demonstrate function using array.

Or

Explain the concept of call by value and call by reference with example.

**3.** Write a program in C to add elements of two dimensional array.

Or

What do you understand by structure? Explain structure to function with example.

**4.** Explain the concept of pointer and array with example.

Or

Write a 'C' program to demonstrate pointer arithmetic.

**5.** Explain various C preprocessor with example.

Or

Write a C program to read and write content of file.

