Time: 3 Hours]

[MAXIMUM MARKS : 50

 $1 \times 10 = 10$

Annual Examination, 2022

B.Sc. Part I

COMPUTER SCIENCE

Paper II

(Programming in C Language)

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

SECTION 'A'

'C' is Long answer type.

Choose the correct answer:

(Multiple Choice Questions)

(i) To write a comment we use in C.
(a) \n (b) \b
(c) // (d) None of these
(ii) The following function is used for single character input in C :

- (a) put C
- (b) puts
- (c) get C
- (d) None of these P.T.O.

A C program :	
(a) Need not cont	ain any function
(b) Most contain a	a function
(c) Needs input da	ata
(d) None of the ab	ove
Function that calls	s itself is called
function.	
(a) Iterative	
(b) Recursive	
(c) Both (a) and (b)	
(d) None of these	
The array index s	tarts with in C
(a) 1	(b) 2
(c) 0	(d) - 1
i) Size of structure in C is:	
(a) Sum of total to its members	oytes size occupied by al
(b) Size of the sm	allest element of it
	(a) Need not continue (b) Most contain a (c) Needs input da (d) None of the ab Function that calls function. (a) Iterative (b) Recursive (c) Both (a) and (b) (d) None of these The array index s (a) 1 (c) 0 Size of structure is (a) Sum of total to its members

(c) Size of the largest element of it

(d) None of the above

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- (vii) Malloc (), calloc () & free () functions definitions are contained in :
 - (a) String.h (b)
- (b) Stdlib.h
 - (c) Stdio.h
- (d) Conio.h
- (viii) A pointer is a special variable :
 - (a) That stores address of another variable
 - (b) That is not stored in memory
 - (c) Both (a) and (b)
 - (d) None of the above
- (ix) The function fread ():
 - (a) is used to write to a file
 - (b) is used to read from a file
 - (c) can both read and write to the file
 - (d) None of the above
- (x) The following function is used to open a file:
 - (a) Copen ()
- (b) Open ()
- (c) Open F
- (d) Fopen ()

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.

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1. Explain formatted I/O in brief.

Or

Explain the history of C.

2. Discuss if else with an example.

Or

What are break and continue statement? Also, write the difference between them.

3. What are Strongs? How can they be declared and initialised?

Or

What is type deaf statement? How can it be used?

4. Explain the use of & and * operators.

Or

Write difference between character array and char pointers.

5. Define the # define directive with example.

Or

What is a file pointer? How can it be declared and used?

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SECTION 'C'

(Long Answer Type Questions) $5 \times 5 = 25$

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

Answer with in **300** words.

1. Describe the structure of C program.

Or

Describe the data types used in C.

2. Discuss for loop with example in C.

Or

What are components of a function? Explain in brief.

3. Discuss union with an example.

Or

Discuss enum with an example.

4. What are various dynamic memory function used in C? Explain.

Or

Explain how can we use pointers to structures in C.

5. Explain conditional compilation directives.

Or

Explain the use of fprintf() with a program.

