

Roll No.

Total No. of Questions : 9]
(2111)

[Total No. of Printed Pages : 7

**BCA (CBCS) RUSA Ist Semester
Examination**

4511

C-PROGRAMMING

BCA-0104

Time : 3 Hours]

[Maximum Marks : 70

Note :- Attempt *five* questions in all, selecting *one* each from Unit-I to Unit-IV. Part-A (Q. No. 1) is compulsory.

Part-A

(Compulsory Question)

1. (A) Multiple Choice Questions :

- (i) Compiler generates files.
 - (a) Executable code
 - (b) Object code
 - (c) Assembly code
 - (d) None of these

C-574

(1)

Turn Over

- (ii) What function can be used to free the memory allocated by `calloc()` ?
- (a) Dealloc
 - (b) Streat
 - (c) Free
 - (d) Memory
- (iii) What will be the output of the following C code ?
1. `# include <stdio.h>`
 2. `void main()`
 3. `{`
 4. `char a='a'`
 5. `int x=(a%10)++.`
 6. `printf ("%d, \n", x);`
 7. `}`
- (a) 6
 - (b) Junk value
 - (c) Compile time error
 - (d) 7

(iv) What will be the output of the following C code ?

```
1. # include <stdio.h>
2. int main()
3. {
4.     int i=0
5.     int j=i++ +i;
6.     printf ("%d, %n", f);
```

- (a) 0
- (b) 1
- (c) 2
- (d) Compile time error

(v) What is the maximum number of dimensions an array in C may have ?

- (a) Two
- (b) Eight
- (c) Twenty
- (d) Theoretically no limit

The only practical limits are memory size and compilers.

- (vi) Which of the following is not a reserved keyword for C ?
- (a) auto
 - (b) case
 - (c) main
 - (d) default
- (vii) A C variable cannot start with :
- (a) A number
 - (b) A special symbol other than underscore
 - (c) Both of these
 - (d) An alphabet
- (viii) What does the following declaration mean ?
- `int (*ptr) [10];`
- (a) ptr is array of pointers to 10 integers
 - (b) ptr is a pointer to an array of 10 integers
 - (c) ptr is an array of 10 integers
 - (d) ptr is a pointer to array

(ix) The keyword used to transfer control from a function back to the calling function is :

- (a) switch (b) goto
- (c) go back (d) return

(x) Specify the two library functions to dynamically allocate memory :

- (a) malloc() and memalloc()
- (b) alloc() and memalloc()
- (c) malloc() and calloc()
- (d) memalloc() and foralloc() $1 \times 10 = 10$

(B) Answer the following in **25** to **50** words :

- (i) Why C is called as structured language ?
- (ii) What are different symbols of flow chart ?
- (iii) Differentiate between constant and variable.
- (iv) Explain what is operand ? What is its relationship with operands ?
- (v) Is it possible to declare and initialize an array in C simultaneously ? If yes, how ?

$$4 \times 5 = 20$$

Part-B

(Unit-I)

10 each

2. Write an algorithm and draw flow chart to find and print Fibonacci sequence.

Or

3. Define data type. Explain various data types used in C in detail by taking examples.

(Unit-II)

10 each

4. Define an Operator. Explain, what are its different types ?

Or

5. What are formatted and unformatted input/output functions used in C. Explain in detail by taking examples.

(Unit-III)

10 each

6. Write a menu driven program with the following options :
 - (i) Biggest of three numbers
 - (ii) Positive or negative number
 - (iii) Factorial of a number
 - (iv) Exit

Or

7. What are Control Statement ? Explain different types of control statements.

(Unit-IV)

10 each

8. What is the need for functions ? What are different ways of passing arguments to a function ?

Or

9. What are the advantages of using pointers ? What are the various operations permitted on pointers ?