Total No. of Questions : 9]   [Total No. of Printed Pages : 7

(2111)

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) Strcat

(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, %on", j);
```

(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 are 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()

1×10=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 ?

4×5=20

Part-B

(Unit-I)

2. Write an algorithm and draw flow chart to find and print Fibonacci sequence.   10 each

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

C-574   (6)

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 ?

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