

- (c) Explain about switch statement. What is the importance of break and continue in switch statement? Give examples. 2+3
- (d) Write a C program to compare two strings for equality without using strcmp()function.
- (e) What is a pointer? Explain address arithmetic with an example. 2+3
- (f) Explain nested structure and self referential structure with an example.

Group – D

4. Answer **any one** question : 10×1=10
- (i) (a) Write a program to find second highest and smallest number in a given array.
- (b) How to initialize and access pointer variable? Explain pointer to a function with example. 5+5
- (ii) (a) Define a structure. Describe how to declare and initialize structure members with an example.
- (b) Explain about the fopen, fclose, feof, forint, fscanf, fseek and rewind functions. 5+5

BCA 1st Semester (Honours) Examination-2022-23

BACHELOR OF COMPUTER APPLICATION

(NEW SYLLABUS)

Course ID : 13312

Course Code : CC-02

Course Title : Introduction to C programming

Time : 2 Hours

Full Marks : 50

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.

Group - A

1. Answer **all** questions : 1×10=10
- (i) Which of the following is not a valid C variable name.
- (a) int number
- (b) float rate
- (c) int variable count
- (d) int \$main
- (e) None of these

- (ii) What is short int in C programming?
- The basic data type of c
 - Qualifier
 - Short is the qualifier and int is the basic data type
 - All of the above mentioned
 - None of these
- (iii) Which of the following declaration is not supported by C language
- String Str;
 - Char* Str;
 - Float=3e2
 - Both String Str; & float Str=3e2;
 - None of these
- (iv) What is an example of iteration in C
- for
 - while
 - do-while
 - All of the above mentioned
 - None of these

Group – B

2. Answer **any five** questions : 2×5=10
- Write any two preprocessor directives in C
 - Write a for loop to print from 10 to 1
 - What is the importance of keywords in C?
 - What is the advantages of C language.
 - What are static variables and functions?
 - Differentiate between calloc() and malloc()
 - How can we store negative integer.
 - What is the purpose of printf() and scanf() in C Program?

Group – C

3. Answer **any four** questions : 5×4=20
- Explain about the basic data types in c language with example
 - Write program for finding the GCD among two numbers using recursion.

- (c) output will be 6,1
 (d) output is compiler dependent
 (e) None of these
- (x) How many times i value is checked in the following c program

```
#include<stdio .h>
int main()
{
int i=0;
while(i<3)
i++;
printf("In while loop\n");\
```

- (a) 2
 (b) 3
 (c) 4
 (d) 1
 (e) none of these

- (v) What will happen if the following C code is executed

```
#include<stdio.h>
int main()
{
intmain=3;
printf("%d",main);
return 0;
}
```

- (a) It will cause a compile time error.
 (b) It will cause a run time error.
 (c) It will run without any error and prints 3.
 (d) It will experience infinite looping.
 (e) None of these.

- (vi) What will be the output of the following C code

```
#include<stdio .h>
int main()
{
Signed char chr;
Chr=128;
Printf("%d\n",chr);
```

```
return 0;
}
```

- (a) 128
- (b) -128
- (c) Depends on the compiler
- (d) All of the mentioned
- (e) None of these

(vii) What will be the output of following C code. (Initial value: x=7,y=8)

```
#include<stdio.h>
Void main()
{
float x;
int y;
printf("Enter the two numbers\n");
scanf("%f%f",&x,&y);
}
```

- (a) 7.000000,7
- (b) Runtime error.
- (c) 7.000000junk
- (d) varies
- (e) None of these

(viii) What will be the output of following C code.

```
#include<stdio.h>
Void reverse (int i);
int main()
{
reverse(1);
void reverse(int i)
{
If(i>5)
Return;
Printf("%d",i);
return reverse(i++,i);
}
```

- (a) 12345
- (b) Segmentation fault
- (c) compilation error
- (d) undefined behavior
- (e) None of these

(ix) Comment on the following C statement n=1;

```
printf("%d",%dn",3 *n,n++);
```

- (a) output will be 3,2
- (b) output will be 3,1