## BCA 1st Semester (Honours) Examination, 2019-20 (CBCS) BACHELOR OF COMPUTER APPLICATION

Course ID : 13512
Course Code : BCA-CC-02
Course Title : Introduction to C Programming
Time: 2 Hours
Full Marks: 50
The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## Group-A

1. Answer all the following questions:
(i) How many main () function we can have in our project?
(a) 1
(b) 2
(c) No limit
(d) Depends on compiler
(e) None of these
(ii) Output for the following program:
```
int main ()
{
extern int i;
i = 20
print F ("%d, size of (i));
return 0;
(a) 20
(b) 0
(c) undefined to i
(d) linked error
(e) None of these
(iii) Output for the following program:
```

int x = 10;
int main ()
{
int x = 20;
print F ("%d",x);
return 0;
}

```
(a) 10
(b) 0
(c) compilation error
(d) undefined
(e) None of these
(iv) Output for the following program:
```

int main ()
{
int a = 5;
int b = 10;
int c = a + b;
print F ("%c";C)
}

```
(a) 0
(b) 15
(c) undefined
(d) any other compiler error
(e) None of these
(v) For C Programming language
(a) constant expression are evaluated at compile.
(b) string constants be concatenated at compile time.
(c) size of array should be known at compile time.
(d) All of the above
(e) None of the above
(vi) What is the maximum number of dimention an array in C may have?
(a) two
(b) eight
(c) twenty
(d) Theoritically no limit. The only practical limit are memory size and compiler.
(e) None of the above
(vii) If \(x\) is an array of integer, then value of \(\mathrm{F} \& \mathrm{X}[1]\) is same as
(a) \& X [i - 1] + size of (int)
(b) \(\mathrm{X}+\) size of (int) * i
(c) \(\mathrm{X}+\mathrm{i}\)
(d) X - i
(e) None of these
(viii) Minimum number of inter change needed to convert the array \(89,19,40,14,17,12,10,17\), \(2,5,7,11,6,9,70\) into a heap with the maximum element at the root in
(a) 0
(b) 1
(c) 2
(d) 3
(e) None of these
(ix) Name the loop that executes at least once.
(a) For
(b) If
(c) Do-While
(d) While
(e) None of these
(x) A pointer pointing to a memory location of the variable even after deletion of the variable known as
(a) For pointer
(b) Null pointer
(c) Void pointer
(d) Dangling pointer
(e) None of these

\section*{Group-B}

Answer any five questions:
\(2 \times 5=10\)
1. When is the "void keyward" used in a function?
2. What are header files and what are it's uses in C Programming?
3. What is the difference between getch () and getche ()?
4. Write a program to print "hello world" without using semi colon.
5. What is static variable?
6. What are local static variables? What are their uses?
7. What is the difference between \(\mathrm{i}++\) and ++i ?
8. Does a break is required by default care in switch statement?

\section*{Group-C}

Answer any four questions:
\(5 \times 4=20\)
1. Write a program in C to print the prime number in between 1 to 100 .
2. Rules for construction integer constant. Write a program to calculate the largest among three numbers.
3. What is the difference between sting and array? What is modulus operator?
4. What is loop? Explain different type of loops with example.
5. What is call by value and call by reference? Explain with an example.
6. Write a program in C that will accept an integer from command line and will check whether this integer is even or odd.

\section*{Group-D}

\section*{Answer any one question:}
\(1 \times 10=10\)
1. What is string? A function that takes a string as argument and calculates its length. A function which takes two string and appends the second at the end of the first.
\(2+4+4=10\)
2. (i) What is file? Write a program in C to convert the content of a given text file to upper case.
(ii) Write a program in C to check to a given string is palindrome or not.
\(2+5+3=10\)```

