Enrollment No: $\qquad$ Exam Seat No: $\qquad$

## C.U.SHAH UNIVERSITY

Winter Examination-2020

## Subject Name : Programming basics using C Language

Subject Code : 4CS01IPC2
Semester : 1

Date :15/03/2021

## Branch: B.Sc.I.T.

Time : 03:00 To 06:00
Marks : 70

Instructions:
(1) Use of Programmable calculator \& any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.
Q.-1 Attempt following MCQs.

1) Which is entry controlled loop?
a) if
b) while
c) do...while
d) All of the above
2) Which is logical operators in C ?
a) \&\&
b) $\quad|\mid$
c) !
d) All of the above
3) Which statement is valid in C ?
a) \#define pi=3.14
b) \#define pi
3.14
c) \#define float pi=3.14
d) None of these
4) The result of $148 \% 5$ is $\qquad$
a) 2
b) 3
c) 8
d) 0
5) printf ("\%c", 65); prints $\qquad$
a) A
b) $\quad \mathrm{B}$
c) C
d) $D$
6) if $a=15, b=20$ then statement, $x=a+++b++$; value of $x$ is $\qquad$
a) 35
b) 36
c) 37
d) 16
7) $\quad$ int $x=0, i ;$
for $(\mathrm{i}=1 ; \mathrm{i}<5 ; \mathrm{i}++$ )

$\{\mathrm{x}=\mathrm{x}+\mathrm{i} ;\}$
printf ("\%d", x);
What is output of above code for value x ?
a) 0
b) 15
c) 10
d) 5
8) To repeat some statement, we are using $\qquad$ .
a) condition
b data types
c) switch
d) Looping
9) The keyword break cannot be simply used within $\qquad$
a) if
b) for
c) do while
d) while
10) Which of following is not an arithmetic operation?
a) $\quad \mathrm{a} *=10$;
b) $\quad \mathrm{a} /=10$;
c) $a!=10$;
d) $\quad \mathrm{a} \%=10$;
11) Which operator is known as ternary operator?
a) ! ?
b) $\quad ?=$
c) $=$ ?
d) ? :
12) C variable cannot start with $\qquad$
a) A number
b) A special symbol or underscore
c) Both A and B
d) An Alphabet
13) Which of following cannot be checked in switch-case statement?
a) char
b) int
c) float
d) None
14) Which is not relational operator in $C$ ?
a) $\quad>=$
b) $==$
c) <
d) $\%=$

## Attempt any FOUR questions from Q-2 to Q-8.

## Q.-2 Attempt following.

a) Write a note on: History of C
b) Define flow chart. Draw a flow chart to find maximum from two numbers.
c) Explain nested if-else statement with syntax and example.
a) Define variable. Explain primary data types of C Language.

b) Explain nested for loop with example. 5
c) Write a note on: Basic structure of C.
Q.-4 Attempt following. ..... 14
a) Explain switch-case statement with syntax and example. ..... 5
b) Why we use break statement? Explain break with example. ..... 5
c) Define array. Explain 1D array initialization with example. ..... 4
Q.-5 Attempt following. ..... 14
a) Explain strlen( ) and strcpy( ) with syntax and example. ..... 5
b) Explain pow( ) and abs( ) function with syntax and example. ..... 5
c) Explain isalpha( ) and sqrt( ) function with syntax and example. ..... 4
Q.-6 Attempt following. ..... 14
a) Write a note on : machine, assembly and higher level languages. ..... 5
b) Define UDF? Write a program to print "hello" message using UDF. ..... 5
c) Define storage class. Write a note on storage classes. ..... 4
Q.-7 Attempt following. ..... 14
a) Write a program to print following. ..... 5554

$$
543
$$

$$
5432
$$

$$
54321
$$

b) Write a C program to print factorial of entered no.5
c) Write a C program to find sum of entered number in array of size 5 . ..... 4
Q.-8 Attempt following. ..... 14
a) Write a C program to print following. ..... 512345
234534545

b) Write a C program to enter number and find sum of entered number digits. 5
c) Write a C program to find maximum from entered three numbers.


