P P SAVANI UNIVERSITY

First Semester of B.sc IT Examination
January 2022
SSIT1010Introduction to computer Programming

25.01.2022, Tuesday   Time: 09:00A.M. To 11:30A.M.   Maximum Marks: 60

Instructions:
1. The question paper comprises of two sections.
2. Section I and II must be attempted in same answer sheet.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION – I

Q - 1	Answer the Following:	**[05]**
(i)	Why 'C' is called machine level language? (True/False) Justify.	
(ii)	What is the use typedef?	
(iii)	_____ is the format specifier of double data type in C?	
(iv)	Define assembly level programming language?	
(v)	_____ is the operator used to represent ternary operator.	
(vi)	What is the use of semicolon (;) and comma (,) in C programming?	
(vii)	What is the output of C program?	

```
int main()
{
    int x=10;
    printf("%06d",x);
    return 0;
}
```

Q - 2 (a)	Explain structure of C program with example.	**[05]**
Q - 2 (b)	Define Algorithm. Write an algorithm to find out the Maximum and Minimum number from given 3 numbers.	**[05]**

OR

Q - 2 (a)	Enlist and explain different types of operators with examples.	**[05]**
Q - 2 (b)	Explain flow chart symbols with its use. Draw a flow chart to print first N prime numbers.	**[05]**
Q - 3 (a)	Enlist and explain inbuilt data types in C with example.	**[05]**
Q - 3 (b)	What are the rules to name a variable in C? Take sample program to demonstrate the use of variable and constants in programming.	**[05]**

OR

Q - 3 (a)	Enlist and explain derived data types in C with example.	**[05]**
Q - 3 (b)	What is the use assignment and bitwise operator in C? Explain with example.	**[05]**
Q - 4	Attempt any one.	**[05]**
(i)	Write an algorithm for palindrome number or not. Also draw flowchart	
(ii)	What is the use of *#include<stdio.h>* line in C program? How we can take a character, number and float number using single input statement? Also write single output statement to print all entered value?	

SECTION – II

Q - 1	Answer the Following:	**[05]**
(i)	What is the output of following code:	

```
#include <stdio.h>
int main()
{
```

```
if(10)
{
    printf("Hello ");
}
printf("How are You!");
return 0;
}
```
(A) Hello   (B) How are You!   (C) Hello How are You!   (D) Syntax Error

(ii)	List type of user define function.	
(iii)	Create structure for Addition of Number.	
(iv)	Advantage or Dis-Advantage of User Define function.	
(v)	Create user-Define function for addition of 3 numbers.	
(vi)	What is pointer.	
(vii)	Write syntax of Structure and union.	
Q - 2 (a)	What is pointer? Explain with example to print the address of variable using pointer.	[05]
Q - 2 (b)	What is Array, Explain Type of Array.	[05]

OR

Q - 2 (a)	Write a Program for all String Function.	[05]
Q - 2 (b)	What is String. Explain Function of String	[05]
Q - 3 (a)	Build a function to check number is prime or not. If number is prime then function return value 1 otherwise return 0.	[05]
Q - 3 (b)	Develop an algorithm to print first N Fibonacci Series.	[05]

OR

Q - 3 (a)   Write an output for this Program   **[05]**

```
#include <stdio.h>
int main()
{
char s = 'm';
char t = 'z' - 'y';
        printf("%d\n", s);
        printf("%c\n", s);
        printf("%d\n", (s+1));
        printf("%c\n", (s+1));
        printf("%d\n", (s-1));
        printf("%c\n", (s-1));
        printf("%d\n", t);
        return 0;
}
```

Q - 3 (b)   Write a C program to display given pattern   **[05]**

```
A
A B
A B C
A B C D
A B C D E
```

Q - 4   Attempt any one.   **[05]**

(i)   Write a Program to Print Student is Excellent, Good, Pass and fail with condition of above 50 marks, 40 marks, 30 marks and belove 20 marks using Switch case.

(ii)   Define recursion. Explain with example. List the advantages of recursion.

****