

# P P SAVANI UNIVERSITY

First Semester of Bsc\_it. Examination

December 2022

SSIT1010: Introduction to Computer Programming

25.11.2022, Friday

Time: 01:00 a.m. To 03:30 p.m.

Maximum Marks: 60

## Instructions:

### Instructions:

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

### SECTION - I

|           |   |      |    |     |
|-----------|---|------|----|-----|
| Q - 1     | Answer the following Question (Any Five)  | [05] | CO | BTL |
| (i)       | What are the key features in the C programming language?                          |      | 3  | 1   |
| (ii)      | What are the basic data types associated with C?                                  |      | 3  | 2   |
| (iii)     | What is the description for syntax errors?  |      | 1  | 1   |
| (iv)      | Define Operators.   |      | 2  | 2   |
| (v)       | What is a nested loop?  |      | 3  | 2   |
| (vi)      | Definition of Array.  |      | 1  | 1   |
| (vii)     | Describe static function with its usage?  |      | 3  | 2   |
| Q - 2 (a) | What do you mean by datatype. List and explain different datatypes with examples. | [05] | 1  | 2   |
| Q - 2 (b) | Write a program to check the given number is odd or even.                         | [05] | 3  | 6   |

### OR

|           |  |      |   |   |
|-----------|--|------|---|---|
| Q - 2 (a) | What do you mean by Operators. List and explain different datatypes with examples. | [05] | 3 | 2 |
| Q - 2 (b) | Write a program to check the given number is odd or even.                          | [05] | 3 | 6 |
| Q - 3 (a) | Explain Case Control Statement.  | [05] | 3 | 1 |
| Q - 3 (b) | What is Error? Explain Error in Detail.  | [05] | 3 | 2 |

### OR

|           |   |      |   |   |
|-----------|---|------|---|---|
| Q - 3 (a) | What is Flowchart. Explain in detail                              | [05] | 3 | 2 |
| Q - 3 (b) | Write an Algorithm for check the given number is positive or not. | [05] | 3 | 6 |
| Q - 4     | Attempt anyone.   | [05] |   |   |
| (i)       | Write C program convert Fahrenheit to Celsius                     |      | 3 | 6 |
| (ii)      | Write C program for Reverse Number                                |      | 3 | 6 |

### SECTION - II

|           |   |      |   |   |
|-----------|---|------|---|---|
| Q - 1     | MCQ/Short Question/Fill in the Blanks (Any Five)              | [05] |   |   |
| (i)       | Difference between library function and User Define function. |      | 1 | 1 |
| (ii)      | Can we change the size of an array at run time?               |      | 1 | 2 |
| (iii)     | Can we define a function with in a function?                  |      | 1 | 1 |
| (iv)      | Can we change the size of an array at run time?               |      | 1 | 2 |
| (v)       | Define Function. List out Type of Function.                   |      | 3 | 1 |
| (vi)      | Create user-Define function for addition of 3 numbers.        |      | 3 | 1 |
| (vii)     | Why 'C' is called middle level language?                      |      | 1 | 2 |
| Q - 2 (a) | Compare between Structure and union                           | [05] | 3 | 4 |

Q - 2 (b) What is pointer? Explain with example to print the address of variable using pointer. [05] 1 2

OR

Q - 2 (a) 1. Write a program to take integer value input from user using scanf() function. [05] 3 6  
2. Write a program to demonstrate use of gets() and puts() function.

Q - 2 (b) Short Note/Long Question/Example [05]

Q - 3 (a) Write an output for this Program [05] 3 6

```
#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) What is String. Explain Function of String [05] 1 2

OR

Q - 3 (a) Write a Program to Print Student is Excellent, Good, Pass and fail with condition of above 50 marks, 40 marks, 30 marks and below 20 marks using Switch case. [05] 3 6

Q - 3 (b) Define recursion. Explain with example. List the advantages of recursion. [05] 1 2

Q - 4 Attempt any one. [05]

(i) Write a C program to display given pattern 3 6

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

(ii) Write a C program to display given pattern 3 6

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

CO : Course Outcome Number BTL : Blooms Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

|             |               |           |
|-------------|---------------|-----------|
| 1: Remember | 2: Understand | 3: Apply  |
| 4: Analyze  | 5: Evaluate   | 6: Create |