

# P P SAVANI UNIVERSITY

Second Semester of B. Tech. Examination

November 2022

SECE1010 Basics of Computer and Programming

7.12.2022, Wednesday

Time: 01:00 P.M. To 03:30 P.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** Define following:

[05]

- |                               |                      |
|-------------------------------|----------------------|
| (i) Software                  | (v) Operating System |
| (ii) RAM                      | (vi) 3D Printing     |
| (iii) Artificial intelligence | (vii) Debugging      |
| (iv) Data Science             |                      |

**Q - 2 (a)** List five input and Output devices.

[05]

**Q - 2 (b)** What is Primary Memory? Explain any two primary memories.

[05]

OR

**Q - 2 (a)** Describe in detail the generation of computers.

[05]

**Q - 2 (b)** Write in details about operating System.

[05]

**Q - 3 (a)** Write in detail about Data Science? Give example

[05]

**Q - 3 (b)** Write in details about the Structure in C.

[05]

OR

**Q - 3 (a)** Write in detail about types of operating system.

[05]

**Q - 3 (b)** What is an algorithm? Give Example.

[05]

**Q - 4** Attempt any one/two.

[05]

(i) What is a flowchart? Give a detailed description of flowchart symbols.

(ii) Describe in detail the features of the C programming language.

**SECTION - II**

**Q - 1** Answer the Following: (MCQ/Short Question/Fill in the Blanks)

[05]

(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;

(ii) What is the result of logical or relational expression in C?

- a) True or False
- b) 0 or 1
- c) 0 if an expression is false and any positive number if an expression is true
- d) None of the mentioned

(iii) Define C language

- a) true  
b) false  
c) depends on the compiler  
d) depends on the standard
- (v) Which of the following are C preprocessors?  
a) #ifdef  
b) #define  
c) #endif  
d) All of the mentioned
- (vi) How many number of characters can be used variable declaration?  
a) 7  
b) 127  
c) 255  
d) No limits
- (vii) Which of the following is not possible statically in C language?  
a) Jagged Array  
b) Rectangular Array  
c) Cuboidal Array  
d) Multidimensional Array
- Q - 2 (a) What do you understand by Array? Write its features [05]  
Q - 2 (b) Describe the different operators according to their precedence. [05]  
OR
- Q - 2 (a) Write short notes on the following: [05]  
i. Constant.  
ii. Variable
- Q - 2 (b) Write short notes on the following: [05]  
i. Header file  
ii. main()
- Q - 3 (a) What is the use of the conditional statement? Explain with the program. [10]  
Q - 3 (b) What is a ternary Operator in C? How is it defined? Explain with an example. [05]  
OR
- Q - 3 (a) What is character array? Explain. [10]  
Q - 3 (b) Explain various types of loops with syntax and example. [05]

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