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# FIRST SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2023 (CBCSS - UG) 

(Regular/Supplementary/Improvement)

## CC21U SDC1 PP02 - PYTHON PROGRAMMING

(Information Technology)
(2021 Admission onwards)
Time : 2.5 Hours
Maximum : 80 Marks
Credit : 4
Part A (Short answer questions)
Answer all questions. Each question carries 2 marks.

1. List the components of computer hardware.
2. Define a supercomputer.
3. List the differences between RAM and ROM.
4. Explain how would you declare a comment in Python?
5. Explain the syntax for ternary operator in python.
6. Define while loop.
7. Define a function. How a function is called in Python?
8. List the built-in functions in Python.
9. Explain how can you reverse list in Python?
10. Define a statement to create an empty tuple named T1.
11. Explain the difference between a list and a set.
12. Define abstraction.
13. Explain important Python errors.
14. Explain Exceptional handling in Python.
15. Define from import statement and write the syntax for it.

Part B (Paragraph questions)
Answer all questions. Each question carries 5 marks.
16. Explain the differences between the following: Fourth Generation Computers and Fifth Generation Computers
17. Explain the Differences between system software and application software.
18. Explain in detail about user defined data types.
19. Compare string and string slices and define string immutability.
20. Explain what is recursive function? Write a Python program to calculate factorial values using recursion
21. Explain Pass by value and pass by reference method
22. Explain how dictionaries are created in Python? What are the basic operations and methods in dictionary?
23. Describe various functions in math module
(Ceiling: 35 Marks)

## Part C (Essay questions)

Answer any two questions. Each question carries 10 marks.
24. (a) Explain different Types of programming languages.
(b) What is a translator software? What are the different kinds of translator software?
25. (a) Define flowchart. Explain the different symbols used in flowchart.
(b) Write the algorithm and draw the flowchart to find the factorial of a number entered by the user.
26. Explain control statements in Python.
27. Create the algorithm, python programs and draw the flowchart to find factorial of a given number.
( $\mathbf{2} \times \mathbf{1 0}=\mathbf{2 0}$ Marks)

