Reg. No ..... Name **22U120**

B. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022

SEMESTER 1 : COMPUTER APPLICATION

COURSE : **19U1CRCAP2 : PROGRAMMING IN 'PYTHON'**

(For Regular – 2022 Admission and Improvement / Supplementary - 2021/2020/2019 Admissions)

Time : Three Hours Max. Marks: 75

PART A

Answer All (1 mark each)

1. What are the various attributes for a file object?
2. Which characteristics of programming methodology refers to the overall readability of the program?
3. What is the purpose of ** operator?
4. What will be the output of the following Python code?

```
i = 1
while False:
    if i%2 == 0:
        break
    print(i)
    i += 2
```

5. What will be the output of the following Python code?

```
i = 1
while True:
    if i%3 == 0:
        break
    print(i)
    i += 1
```

6. Give an example for a dictionary.
7. Name the two membership operators.
8. What is a frozenset?
9. What are user defined functions?
10. What is the purpose of is operator?

(1 x 10 = 10)

PART B

Answer any 8 (2 marks each)

11. What is the purpose of break statement in Python?
12. What are the primitive built-in types in Python?
13. How will you get all the values from a dictionary?

14. What will be the output of the following Python code?

```
i = 0
while i < 3:
    print(i)
    i += 1
else:
    print(0)
```

15. What is the difference between local and global variables?
16. How will you replace all occurrences of old substring in string with new string?
17. Python is a Free and Open Source language. What do you understand by this feature?
18. How a module is located in Python?
19. Briefly explain input and output functions in python.
20. What is the purpose of __init__.py in a Python package?

(2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. Explain with an example the execution of variable length arguments.
22. Write a python program to display the content of a file.
23. Distinguish between remove() and discard() methods with examples.
24. Give the difference between logical and bitwise operators.
25. What is a recursive function? Give an example.
26. Explain for loop with else with an example.
27. Explain while loop in Python with an example.

(5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Explain algorithms and flowchart with its benefits.
29. Explain different types of loops with syntax and examples.
30. What are the basic list operations that can be performed in Python? Explain each operation with its syntax and an example
31. Explain the following
    a) Functions
    b) Modules
    c) import statement

(12 x 2 = 24)