ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE -27
B.C.A III SEMESTER
END SEMESTER EXAMINATION: NOVEMBER 2020
CA 3118 – OBJECT ORIENTED PROGRAMMING USING PYTHON

Time – 2.5 hours   **Max Marks-70**

This question paper contains -2 printed pages and 3 parts

Part A

Answer ALL the questions   **10X2=20**

1. What are the two modes of working in IDLE?

2. What is the difference between tuples and lists in Python?

3. What will be the output of the following Python code

```
for i in range(5):
 if i == 5:
 break
 else:
 print(i)
else:
 print("Here")
```

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

```
class A():
        def disp(self):
 print("A disp()")
class B(A):
 pass
obj = B()
obj.disp()
```

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

   a)print("xyyzxyzxzxyy".count('yy', 2))

   b) print("xyyzxyzxzxyy".count('xyy', 2, 11))

6. How to split strings and what function is used to perform that operation?

7. List a few functions in math module. What is the value returned by int(math.pow(3, 2))?

8. What does the keyword self mean in python?

9. Differentiate between print statement in C and Python.

10. What are the general types of errors with example?

Part B

Answer any FIVE of the following   **5x6=30**

11. Write a program to repeatedly check for the largest number from the numbers entered by the user until the user enters **"done"**.

12. Give the syntax and explain any six methods that are used in Python Lists.

13. Write a python program to count the occurrences of characters in strings. Provide two implementations iterative and recursive.

14. Explain the need for **continue** and **break** statements. Write a program to check whether a number is prime or not. Prompt the user for input.

15. Write a python GUI program of window size 100 X 200 that displays a button at x=50 and y=150 labelled as "Click Here". Also add a function on that button that will create a message box having message "Thank You For Clicking".

16. What is regular expression in python? Explain the following regular expression function match() and search() with suitable examples..

17. a)How to create a constructor?   (3)

     b)What is a static method in python?   (3)

Part C

Answer any TWO of the following   **2x10=20**

18. Discuss inheritance in Python programming language. Write a Python program to demonstrate the use of super() method.

19. a)Write a short note on **range** function with example   (5)

     b)Write a code snippet in python to modify elements in a dictionary   (5)

20. a) Describe in detail how exceptions are handled in python. Give relevant examples.   (6)

     b)Write a python program to create a package and import the package.   (4)