

NOVEMBER 2020

50431/SE21A

Time : Three hours

Maximum : 75 marks

PART A — (10 x 2 = 20 marks)**Answer any TEN questions.**

1. List the things to solve a problem computationally. Pg. 1+1
2. What is an algorithm? Pg. 1, 4
3. What is python standard library? Pg. 1, 21
4. List the three fundamental forms of control in programming. Pg. 2, 2
5. What is iterative control statement? Pg. 2, 4
6. Name the operations performed on list.
7. What is a program routine? Pg. 3, 1
8. What is a keyword argument? Pg. 3, 18
9. List the sequence operation on strings.
10. List the standard exception in python.
11. What is a dictionary? Pg. 5, 1
12. Name the three features of object oriented programming.

PART B — (5 x 5 = 25 marks)**Answer any FIVE questions.**

13. Explain briefly the fundamental hardware components. 1, 7, 1
14. Explain the basic arithmetic operation in python with example. Pg
15. Explain the selection control statement with a program example. Pg
16. Compare definite and in-definite loops in python. Pg. 2, 9 to
17. Explain the calling value-Returning function. Pg. 3, 13 to 3

18. Explain the fundamental features of turtlegraphics. $\text{PQ. } 4 \times 8 \text{ TO}$
19. Develop a fraction class for demon starting motion of encapsulation. PQ.

PART C — (3 x 10 = 30 marks)

Answer any THREE questions.

20. Describe and use of operators and expressions with examples. $1 \cdot 30 \text{ TO}$
1. Describe in detail iterating over list in python. $\text{PQ. } 2 \cdot 20 \text{ TO } 2 \cdot 34$
2. Write a python program to convert fahrenheit to celsius. Qst no. 2
3. Explain the use of modules and namespaces in python.

Explain the use of special methods in python.

APRIL 2021

50431/SE21A

Time : Three hours

Maximum : 75 marks

PART A — (10x 2 = 20 marks)**Answer any TEN questions.**

1. What are the limits of computational problem solving?
2. What is binary representation?
3. What is an IDE?
4. What is control structure?
5. What is infinite loop?
6. What is boolean flag? *Python Boolean type is one of the built-in data types provided by Python, which represents one of the two values that is true or false.*
7. What is a positional argument?
8. What is default argument in Python?
9. What is an object?
10. List any eight sequence operation on strings in Python. *Generally, it is used to represent the truth values of the expression.*
11. Give the syntax for declaring dictionaries in Python with an example.
12. What is a class?

PART B — (5 x 5 = 25 marks)**Answer any FIVE questions.**

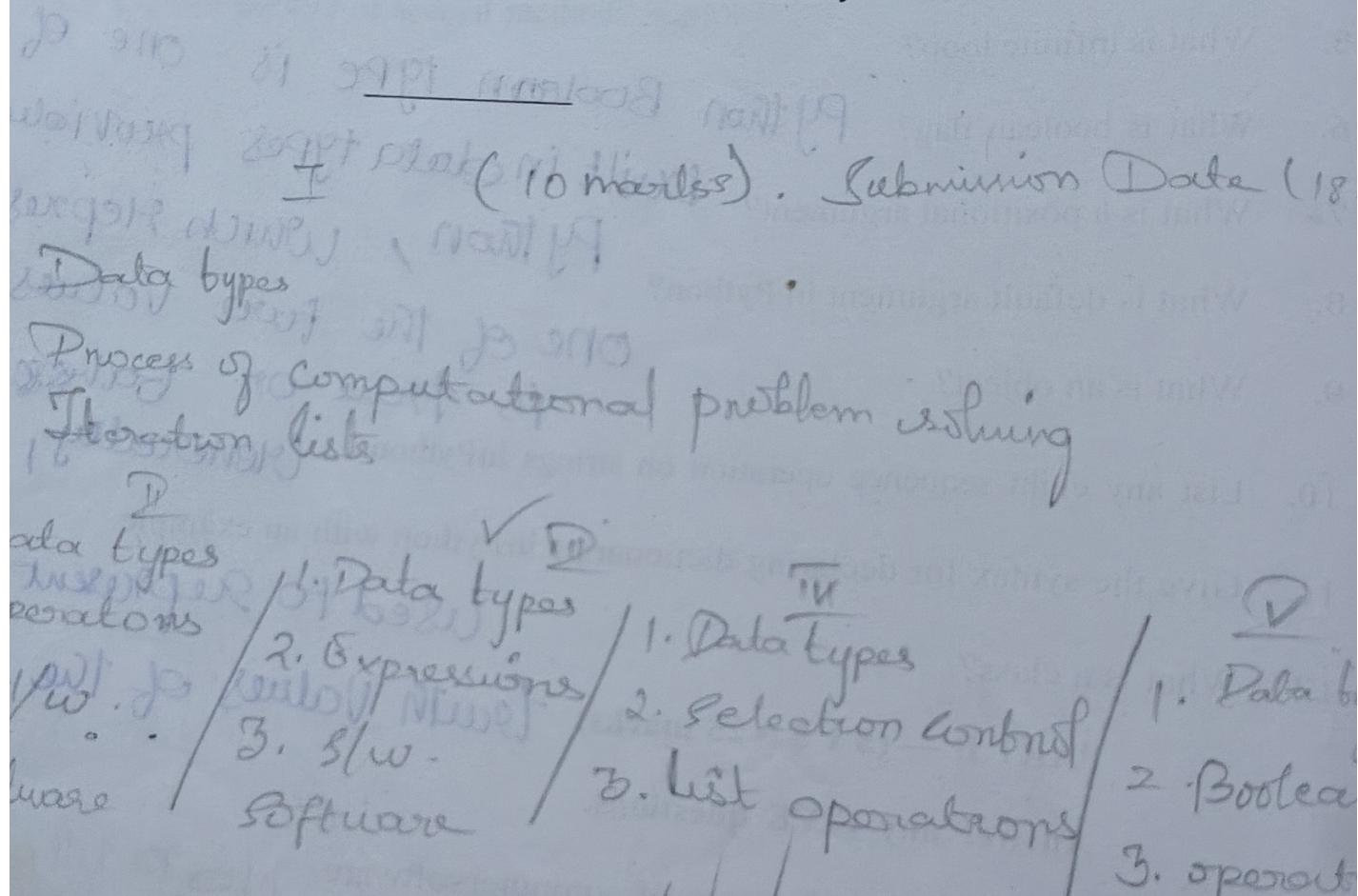
- (13.) Explain the fundamental issues of computer software. *1.10 to 1.11*
- (14.) Explain the use of numeric and string literal values. *1.23 to 1.25*
15. Explain indentation in Python with an example.
16. Explain the while statement in Python with example.
17. Explain the non-value returning function in Python. *1.11*

18. Write a brief note on references in Python.
19. Explain a fundamental concept of Object Oriented Programming.

PART C — (3 x 10 = 30 marks)

Answer any THREE questions.

- (20) Explain the steps in the process of computational problem solving. 1, 14 to 1, 1
21. Write a Python program to display the number of days in a given month.
22. Describe the concept of parameter passing in Python.
23. Explain the process of opening and closing a file in Python. 1, 3, 4, 6
24. Describe the design of recursive functions in Python.



1, 2, 3, 4, 5, 6, 7, 8, 9, 10