STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2023 – 2024)

POST GRADUATE DIPLOMA IN COMPUTER SCIENCE, NOVEMBER 2023 FIRST SEMESTER

COURSE : MAJOR CORE PAPER : PROGRAMMING WITH PYTHON SUBJECT CODE : 23CS/DC/PP14 TIME $: 1\frac{1}{2}$ HOURS

MAX. MARKS: 50

SECTION A

Answer all the questions

- 1. Define named constants.
- 2. Write the method required to draw any two shapes using turtle.
- 3. Differentiate keyword and positional arguments.
- 4. What is multidimensional list?
- 5. What is dictionary?

SECTION B

Answer any FOUR of the following questions

- 6. Explain the various types of assignment operators in Python.
- 7. Describe the different formatting function for numbers in Python with examples.
- 8. Identify the various kinds of arguments in the function. Explain it with an example.
- 9. Illustrate the various operations defined in lists.
- 10. Write a Python program to perform Insertion sort with an example.
- 11. Discuss the various operations in a file along with its syntax.

SECTION C

Answer any TWO of the following

- 12. Summarize the various types of looping constructs. Apply the looping construct to find the sum of digits of a given number.
- 13. Justify that binary search is more efficient than linear search. Explain
- 14. Compare the usage of lists, tuples data type? Give an example for each data type

(4 X 5 = 20)

(5 X 2 = 10)

 $(2 \times 10=20)$