SRI RAMAJAYAM GLOBAL SENIOR SECONDARY CBSE SCHOOL

Chapter-5

COMPUTATIONAL THINKING AND GETTING STARTED WITH PYTHON (11.09.2020)

STD: XI   **TIME: 1.30 Hour**

SUBJECT: COMPUTER SCIENCE   **TOTAL MARKS: 50**

Section – A (One Marks)

I. MCQ (Multiple Choice Questions)   **15X1=15**

1. What is the correct definition of an algorithm?

    a) An algorithm is a step by step instructions to solve a problem.
    b) An algorithm is a process of baking bread.
    c) An algorithm is a software used to compute numbers.
    d) An algorithm is the process of breaking problems.

2. What is computational thinking?

    (a) Giving instructions to a computer
    (b) Thinking like a computer - in binary
    (c) Using a set of techniques and approaches to help to solve problems

3. Breaking down problems or processes into smaller pieces is a component of computational thinking called _____.

    a) Abstraction
    b) Algorithmic thinking
    c) Pattern recognition
    d) Decomposition

4. Why do we need to think computationally?

    (a) To help us to program
    (b) To help us solve complex problems more easily
    (c) To help us to think like a computer

5. Being able to discern similarities and differences within a pattern is a component of computational thinking that is called _____.

    a) Abstraction
    b) Algorithmic thinking
    c) Pattern recognition
    d) Decomposition

6. Which of the following is NOT a computational thinking technique?

    (a) Decomposition
    (b) Pattern recognition
    (c) Coding

7. The four main components of computational thinking are:

    a) Decomposition, computation, algorithm, method
    b) Pattern recognition, decomposition, procedure, agility
    c) Abstraction, pattern recognition, decomposition, algorithmic thinking

8. Which of the following is an example of thinking computationally?

    (a) Planning out your route when going to meet a friend
    (b) When going to meet a friend, wandering around until you find them
    (c) When going to meet a friend, asking a parent to plan your route for you

9. Which of these is NOT a computational thinking technique?

    a) Coding
    b) Algorithm Design
    c) Decomposition
    d) Pattern Recognition

10. Which of the following is NOT an example of computational thinking?

    (a) Letting the bossiest friend decide where you should all go
    (b) Considering the different options carefully before deciding upon the best one
    (c) Discussing with your friends how much time and money you have before choosing from a shortlist of Places

11. When was Python released?

    a) 1989   b) 1990   c) 1991   d) 1992

12. What is a complex problem?

    (a) A problem that, at first, is not easy to solve
    (b) A problem that, at first, is not casy
    (c) A problem that, at first, is not easy to solve or to understand

13. Which of the following are valid strings in Python?

    (a) "Hello"   (b) 'Hello   (c) "Hello   (d) Hello"

14. Who developed python programming language?

    (a) Guido Wan Rossum   (b) Guido Van Rosum

    (c) Guido Van Rossum   (d) Guido Wan Rosum

15. Python programming language got its name from which show.

    (a) Monty Flying Circus   (b) Python's Flying Circus

    (c) Monty Python's Flying Circus   (d) Monty Flying Circus

IV. Answer the following questions   2x4=8

27. Write a correct output of following Python Programming code?

(a)

```
    print ("Such as")
#print("Take every chance.")
  print("Drop every fear. ")
```

Output:

Such as
Drop every fear.

(b)

```
A=20
B=5
C=A*B
D=A/B
E=A%B
print(C)
print(D)
print(E)
```

Output:

100
4.0
0

Full Forms:

IDLE	-	Integrated Development and Learning Environment.
BBC	-	British Broadcasting Corporation
GUI	-	Graphical user interface
.py	-	Extension of Python

ShortCut Keys:

Ctrl+N	-	New File
Ctrl+O	-	Open a File
Ctrl+S	-	Save a File
Ctrl+Shift+S	-	Save As
Run Module	-	Run
Ctrl+P	-	Print
Alt+F4	-	Close a File
Ctrl+Q	-	Exit
Ctrl+C	-	Copy
Ctrl+X	-	Cut
Ctrl+V	-	Paste
\n	-	New line

Simple Python programs

Program:1

```python
print("AbCdEf")
print('AbCdEf')
print("abcdef")
print("ABCDEF")
```

Output:

```
AbCdEf
AbCdEf
abcdef
ABCDEF
```

Program:2

```python
print("jovitha 11.10.2016 TVmalai")
```

Output:

```
jovitha 11.10.2016 Tvmalai
```

Program:3

```python
print("jovitha")
print("11.10.2016")
print('TVmalai')
```

Output:

```
jovitha
11.10.2016
Tvmalai
```

Program:4

```python
print("jovitha\n11.10.2016\nTVmalai")
```

Output:

```
jovitha
11.10.2016
Tvmalai
```

Program:5

```
a=10
b=5
print(a)
print("b=",b)
```

Output:

10
b= 5