# **ASSIGNMENT**

CLASS: XII SUBJECT: COMPUTER SCIENCE

# UNIT II

# CHAPTER 5: PYTHON – VARIABLES AND OPERATORS PART I

|    |   | PART I                                       |  |  |  |
|----|---|--|--|--|--|
| M  | Multiple Choice Questions:  |  |  |  |  |
| 1. | Who developed Python?   |  |  |  |  |
|    | a. Ritche   | b. Guido Van Rossum                          |  |  |  |
|    | c. Bill Gates   | d. Sundar Pitchai                            |  |  |  |
| 2. | The Python Prompt that instruction is                                 | indicates the interpreter is ready to accept |  |  |  |
|    | a. >>>  | b. <<<                                       |  |  |  |
|    | c. #  | d. <<  |  |  |  |
| 3. | Which of the following shortcut is used to create new Python program? |  |  |  |  |
|    | a. Ctrl+C   | b. Ctrl+F                                    |  |  |  |
|    | c. Ctrl+B   | d. Ctrl+N                                    |  |  |  |
| 4. | Which of the following shortcut is used to save Python program?       |  |  |  |  |
|    | a. Ctrl+S   | b. Ctrl+V                                    |  |  |  |
|    | c. Ctrl+C   | d. Ctrl+N                                    |  |  |  |
| 5. | Python files are saved with extension                                 |  |  |  |  |
|    | apy   | bpr  |  |  |  |
|    | cpq   | dps  |  |  |  |
| 6. | This symbol used to print more than one item on a single line is      |  |  |  |  |
|    | a. Semicolon(;)   | b. Dollar(\$)                                |  |  |  |
|    | c. Comma(,)   | d. Colon(:)                                  |  |  |  |
|    |   |  |  |  |  |

| 7.  |   | naracter is used to give comments in Python |  |  |
|---|---|---|--|--|
|   | program?<br>a. #                              | b. &  |  |  |
|   | c. @  | d. \$                                       |  |  |
| 8.  | Which operator is also call                   | ed as comparative operator?                 |  |  |
|   | a. Arithmetic                                 | b. Relational                               |  |  |
|   | c. Logical                                    | d. Assignment                               |  |  |
| 9. Which Operator is also called as Conditional Operator?   |   | led as Conditional Operator?                |  |  |
|   | a. Ternary                                    | b. Relational                               |  |  |
|   | c. Logical                                    | d. Assignment                               |  |  |
| 10. Which function is used to display result on the screen? |   |   |  |  |
| a. print() b.input()  |   | b.input()                                   |  |  |
|   | c. sum ()                                     | d. mult ()                                  |  |  |
|   |   | PART II                                     |  |  |
|   | ery Short Answers: What are the different mod | es that can be used to test Python program? |  |  |

- 2. What is a literal? What are the types of literals?
- 3. Write short notes on Tokens?
- 4. What are the different operators that can be used in Python?
- 5. Write short notes on Exponent data?

### PART III

### **Short Answers:**

- 1. What are the assignment Operators that can be used in Python?
- 2. Write short note on Arithmetic operators with examples.
- 3. Write short notes on Escape Sequence with example?
- 4. Explain Ternary Operators with examples.
- 5. What are String Literals? Explain.

### **PART IV**

## Long Answers:

- 1. Discuss in detail about Tokens in Python?
- 2. Explain input() and print() functions with examples.

# CHAPTER 6: CONTROL STRUCTURES PART I

# **Multiple Choice Questions:**

| 1.   | 1. How many important control structures are there in python? |                                    |
|--|---|------------------------------------|
|  | a) 3  | b) 4                               |
|  | c) 5  | d) 6                               |
| 2.   | Which statement is the simplest of                            | of all decision making statements? |
|  | a) if - else  | b) ifelseif                        |
|  | c) simple if  | d) Nested if                       |
| 3.   | Which punctuation should be used in the blank?                |                                    |
|  | if <condition><br/>statement-block 1<br/>else:</condition>    |                                    |
|  | statement-block 2<br>a);                                      | b):                                |
|  | c) ::   | d)!                                |
| 4. elif can be considered to be an abbreviation of |   | breviation of                      |
|  | a) elseif   | b) if                              |
|  | c) simple if  | d) None                            |
| 5. What plays a vital role in python programming?  |   | programming?                       |
|  | a) statements   | b) control                         |
|  | c) structure  | d) indentation                     |
| 6.   | How many types of loops are ther                              | e in python?                       |
|  | a) 2  | b) 3                               |
|  | c) 4  | d) 5                               |
| 7.   | Which is the entry check loop?                                |                                    |
|  | a) for  | b) while                           |

|    | c) a & b   | d) N  | one                                 |
|----|--|-------|-------------------------------------|
| 8. | The condition in the if statement  | shoul | ld be in the form of                |
|    | a) Arithmetic or Relational expres   | sion  | b) Arithmetic or Logical expression |
|    | c) Relational or Logical expression  | ı     | d) Arithmetic                       |
| 9. | Which is the most comfortable loo  | pp?   |                                     |
|    | a) do-while  | b) w  | hile                                |
|    | c) for   | d) if | elif                                |
| 10 | <ul><li>a) loop placed within another loo</li><li>a) for loop</li><li>c) Nested loop</li></ul> | b) w  | called as?  hile loop  o-while loop |
|    |  |       |                                     |

## PART II

# **Very Short Answers:**

- 1. Define Control Structures?
- 2. Write the syntax of if -else statement?
- 3. Write note on range() in loop?
- 4. Name the 3 jump statements in Python?
- 5. Write a note on break statement?

### PART III

### **Short Answers:**

- 1. Write a note on if -else structure.
- 2. Write the syntax of while loop.
- 3. What is the output of the following code? for i in range (2,10,2): print (i, end = ' ')
- 4. Write the differences between branching and looping?
- 5. List the differences between break and continue statement.

# **PART IV**

# Long Answers:

- 1. Write a detail note on for loop.
- 2. Write a python program to display all 3 digit odd numbers.

# **CHAPTER 7: PYTHON FUNCTIONS**

# PART I

# Multiple choice questions

| 1. A named blocks of code that are designed to do one specific job is |   |  |
|---|---|--|
|   | as<br>a) Loop<br>a) Function  | b) Branching<br>d) Block                     |
| 2.  | Which function is called as anony                                   | ymous unnamed function?                      |
|   | a) Lambda   | b) Recursion                                 |
|   | c) Function   | d) Define                                    |
| 3.  | A function which calls itself is ca<br>a) Built-in<br>c) Lambda     | lled as<br>b) Recursion<br>d) Return         |
| 4.  | Which of the following keyword is a) define c) finally              | b) for<br>d) def                             |
| 5.  | 5. While defining a function which of the following symbol is used? |  |
|   | a);   | b) .   |
|   | c):   | d) \$  |
| 6.  | 6. Which of the following keyword is used to exit a function block? |  |
|   | a) define   | b) return                                    |
|   | c) finally  | d) def                                       |
| 7.  | function returns an absea) abs() c) chr()                           | olute value of a number? b) ord() d) bin()   |
| 8.  | Python should not be us a) key words c) variables                   | sed as function name ? b) arguments d) scope |

| 9.  | A variable withcan be   | used anywhere in the program? |  |  |
|-----|---|-------------------------------|--|--|
|     | a) local scope  | b) global scope               |  |  |
|     | c) class scope  | d) function scope             |  |  |
| 10. | 10. Any number of return statements are allowed in a function definition but of them is executed at run time? |                               |  |  |
|     | a) only one   | b) two                        |  |  |
|     | c) three  | d) four                       |  |  |

## PART II

# **Very Short Answers:**

- 1. What is function?
- 2. Write the different types of function?
- 3. What are the advantages of function?
- 4. Write short notes about sqrt() function with example?
- 5. Write about return statement.

### PART III

### **Short Answers:**

- 1. Write short notes about anonymous functions?
- 2. Write the rules of local variables?
- 3. Write the basic rules for global keyword in python?
- 4. Differentiate floor() and ceil() function?
- 5. How recursive function works?

### **PART IV**

# Long Answers:

1.Explain the following built in functions.

2. Explain recursive function with an example.

# CHAPTER - 8: STRINGS AND STRINGS MANIPULATION PART I

# Choose the best Answer:

| 1. Which of the following operator is used for concatenation |  | used for concatenation?             |  |
|--|--|-------------------------------------|--|
|  | a) +   | b) &                                |  |
|  | c) *   | d) =                                |  |
| 2.   | Defining strings with in triple quo                                      | otes allows creating                |  |
|  | a) Single line strings   | b) Multiple line strings            |  |
|  | c) Double line strings   | d) Multiple strings                 |  |
| 3.   | String in python are   |                                     |  |
|  | a) immutable   | b) changeable                       |  |
|  | c) countable   | d) flexible                         |  |
| 4.   | is known as slicing open   | rator                               |  |
|  | a) ()  | b) {}                               |  |
|  | c) [ ]   | d) + =                              |  |
| 5.   | Which of the following formatting character is used to print exponential |                                     |  |
|  | notation in upper case?  |                                     |  |
|  | a) %e  | b) %E                               |  |
|  | c) %g  | d) %n                               |  |
| 6.   | The subscript of a string may be .                                       | ?                                   |  |
|  | a) positive  | b) negative                         |  |
|  | c) both (a) and (b)  | d) either (a) or (b)                |  |
| 7.   | Which of the following is used as  | place holders or replacement fields |  |
| which get replaced along with format () function?            |  | mat () function?                    |  |
|  | a) {}  | b) <>                               |  |

|   | ,                         | ,                                    |
|---|---------------------------|--------------------------------------|
| 8.  | starts with a backslash   | n and can be interpreted differently |
|   | a) Escape sequences       | b) Capitalize                        |
|   | c) End                    | d) Range                             |
| 9.  | returns the length of the | e string ?                           |
|   | a) len ()                 | b) title ()                          |
|   | c) upper()                | d) lower ()                          |
| 10 is used to add more string at the end of an existing string? |                           |                                      |
|   | a) Concatenation          | b) Repeating                         |
|   | c) Append                 | d) String slicing                    |
|   |                           |                                      |

d) ^^

### PART II

# **Very Short Answers:**

1. Define string.

c) ++

- 2. Is it possible to modify a string in python?
- 3. How will you delete a string in python?
- 4. What is slicing?
- 5. What will be the output of the following python code? str1 ="School" print(str1\*3)

### PART III

### **Short Answers:**

- 1. Write short note on
  - (a) capitilize() (b) swapcase()
- 2. Write short notes on format () function with example
- 3. Write short notes on count() function in python.
- 4. Explain any six Escape sequences supported by python.
- 5. What is Concatenation? Give an example

#### PART IV

## Long Answers:

- 1. Explain the string operators in python with suitable example.
- 2. Write a program to check whether the give string is a palindrome or not