

- N.B. 1) All questions are compulsory.
 2) Figures to the right indicate marks.
 3) Illustrations, in-depth answers and diagrams will be appreciated.
 4) Mixing of sub-questions is not allowed.
 5) Assume suitable data wherever required.

Q. 1 Attempt All(Each of 5Marks)**(15M)****(a) Multiple Choice Questions**

- <, >, <= are _____ operators
 i) Arithmetic ii) Logical iii) Relational iv) Assignment
- Which of the following function converts a string to all lowercase?
 i) lower() ii) isdecimal() iii) swapcase() iv) title()
- Python is _____ language.
 i) Compiled ii) Procedure iii) Interpreted. iv) Non-Interactive
- What is the output of len(["Hello","world","Python"])?
 i) 1 ii) 2 iii) 3 iv) 4
- What is "Hello".replace("l","e")?
 i) Heeeo ii) Hlllo iii) Heleo iv) None of these

(b) Fill in the blanks

- What is the data type of the below object _____ ?
 T = ("PY", 22, 'hello', 1).
- Ternary operator (?) is used for _____
- The term IDLE stands for _____
- To use in-built mathematical functions we need to import _____ module.
- An instance of a class is called as _____

(c) Write answers for the following in few lines

- Define Assignment statement.
- Write the use of del statement.
- What is the output when following statement is executed _____ ?
 >>>"a"+"b"
- Define Expression statement.
- Explain the use of "break" statement.

Q. 2 Attempt the following (Any THREE) (15M)

- (a) What is the difference between simple and compound statements? Explain with example.
- (b) What is Datatype? What are the rules and conventions for declaring a variable?
- (c) Explain any five arithmetic operators in Python.
- (d) Write a short note on tuple.
- (e) Define Function. Write the syntax to define function. Give example of function definition.
- (f) Write a program to calculate Simple Interest. Take Principal amount, rate of interest and number of years from the user. (Hint: Simple Interest= (Principal amount * Rate of interest * Number of years) / 100.)

Q. 3 Attempt the following (Any THREE) (15M)

- (a) How do we implement if , elif, else condition? Explain with an example.
- (b) Discuss the difference between local and global variable.
- (c) What is actual and formal parameter? Explain the difference along with an example.
- (d) Explain continue statement.
- (e) What is nested while loop? Explain with example.
- (f) Write a program to print reverse of a number. Take input from user.

Q. 4 Attempt the following (Any THREE) (Each of 5Marks) (15M)

- (a) Discuss Anonymous function.
- (b) Explain "Dictionary" concept.
- (c) Define Built-in functions. List any 4 built-in functions. Explain dir() functions.
- (d) Write a program to create an anonymous function to calculate cube of a number.
- (e) What is List? Explain with example.
- (f) Write a short note on class.

Q. 5 Attempt the following (Any THREE) (Each of 5Marks) (15M)

- (a) Discuss Operator Precedence along with an example.
- (b) Explain Time module and its function.
- (c) What is comment? Why we need it? How do we implement it?
- (d) Write a python program to take a string from user and count number of vowel present in it.
- (e) Explain for loop with example.