

Date: 19.11.2019

Time : (2½ Hours)

Total Marks: 75

- N.B. (1) All questions are compulsory.  
(2) Figures to the right indicate marks for respective sub questions.  
(3) Figures to the right indicate marks.  
(4) Illustrations, in-depth answers and diagram will be appreciated.  
(5) Mixing of sub-question is not allowed.

Q.1) Attempt all. (Each of 5 marks) (15)

(a) Multiple Choice Questions (Choose the correct alternative.) (5)

(i) And, or, not are \_\_\_\_\_ operators.

- (a) Arithmetic (b) Logical  
(c) Relational (d) Assignment

(ii) IDLE in python stands for \_\_\_\_\_.

- (a) Integral design language (b) Internet development environment  
(c) Integrated design environment (d) Integrated development environment

(iii) Which one of the following has the highest precedence in the expression?

- (a) Exponential (b) Addition  
(c) Multiplication (d) Parentheses

(iv) A variable defined inside the function is called \_\_\_\_\_ variable.

- (a) Block (b) Identifier  
(c) Local (d) Global

(v) What is the output of the len(["hello", "world", "python"])

- (a) 2 (b) 3  
(c) 4 (d) 5

(b) Fill in the blanks. (5)

{ Fun , Def , object , list, Method , 0\_B , B , list , tuple, Dictionary, }

(i) \_\_\_\_\_ is unordered collection of key value pair?

(ii) \_\_\_\_\_ cannot be used as variable name

(iii) An instance of class is called \_\_\_\_\_

(iv) \_\_\_\_\_ is Immutable.

(v) \_\_\_\_\_ Which keyword is used for function?

(c) Short Answers Write answers in one or two lines. (5)

(i) Define Algorithm?

(ii) Use of Break Statement?

(iii) Write syntax to create a List?

(iv) What is the difference between list and tuples in Python?

(v) Write syntax of if statement?

Q.2) Attempt the following:(ANY THREE) (15)

(i) Write a short Note on IDLE?

(ii) Define Variable:

i) Explain how to update variable?

ii) Variable assignment to another variable?

iii) Variable Reassignment?

- (iii) What is Operator? Explain all operators with their example?
- (iv) Write a note on AssertStatement?
- (v) Write a note on implicit and explicit declaration of variable with example?
- (vi) Write python Program to find Number is even or odd?

Q.3) Attempt the following:(ANY THREE) (15)

- (i) Define iterative control statement (looping statement) and explain While Loop statement with example?
- (ii) Explain break statement with example?
- (iii) Define Function and its Advantages?
- (iv) Illustrate the use of range () in python along with an example.
- (v) Define Dictionary, How to create, update and delete it? Explain with suitable example?
- (vi) Discuss the difference between local and global variable.

Q.4) Attempt the following:(ANY THREE) (15)

- (i) What is List Comprehension? Give example.
- (ii) Discuss Anonymous functions?
- (iii) Explain the following term of object oriented programming
  - i) Class
  - ii)Methods
- (iv) Define Built-in functions. Explain any 4 built-in functions along with an example.
- (v) Write a python program to create to create function using lambda to Multiplication of two numbers?
- (vi) Discuss built-in Methods of String? ( use in class)

Q.5) Attempt the following:(ANY THREE) (15)

- (i) Describe any 5 features of Python language?
- (ii) What is the role of indentation in python? Provide example to support your answer
- (iii) Write a program to accept percentage from user. If percentage is < 35 then print “Fail”. If percentage  $\geq 35$  and < 60 print “second class”. If percentage  $\geq 60$  and < 75 print “First Class”. If percentage  $\geq 75$  print “Distinction”.
- (iv) Write Python Program to Calculate area of circle?
- (v) Explain “for” loop using following points:
  - i) Use
  - ii) Syntax
  - iii) Example

\*\*\*\*\*