SCRIPTING LANGUAGES (PYTHON)

307/2(N)

Full Marks: 60

Answer the following questions from Group-A, B & C as directed.

GROUP-A

1. Choose the correct alternative (Any 10)

 $1 \times 10 = 10$

- i) Which one of the following is not a keyword in Python language? A) pass b) eval c) assert d) nonlocal
- ii) The input() function takes user's input as a a) integer b) float c) string d) character
- iii) What is the output of the following? x = ['ab', 'cd']for i in x: x.append(i.upper()) print(x)
- a) ['AB', 'CD'].
- b) ['ab', 'cd', 'AB', 'CD']. c) ['ab', 'cd'].
- d) none of the mentioned
- iv) Which statement is used to terminate the execution of the nearest enclosing loop in which it appears?
- a) Pass b) break c) continue d) jump
- v) What will be the output of Python code snippet $x \le 2$ if x=1? a) 4 b) 2 c) 1 d) 8
- vi) The default access mode is a) r b) w c)rb d)wb
- vii) DRY principle makes the code a) Reusable b) Loop forever c)Bad and repetitive d) Complex
- viii) What will be the output of the following Python function? min(max(False, -3, -4), 2, 7)
 - a) -3 b) -4 c) error d) false
- ix) What will be the output of the Python expression round(4.576)? a) 4 b) 4.6 c) 5 d) 4.5
- x) Which function is called an anonymous function? a) Lambda b) Map c) Filter d) Reduce
- xi) What does pip stand for python? a) Unlimited length b) All private members must have leading and trailing underscores c) Preferred Installer Program d) None of these
- xii) Which of the following functions can help us to find the version of python that we are currently working on? a) sys.version(1) b) sys.version(0) c) sys.version() d) sys.version
- xiii) What will be the output of print(10,20,30,sep="/") a) a) 10 20 30 b) 10/20/30 c) 10\20\30 d) error
- xiv) Which of the following is a Python tuple? a) {1, 2, 3} b) {} c) [1, 2, 3] d) (1, 2, 3)
- xv) Predict output for the snippet for j in range(1,5):

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print(j)
   a) 1 2 3 4, b) indentation error, c) jjjj, d) j
   2. Fill in the blanks (Any ten):
                                                                                               1 \times 10 = 10
   i) All keywords in Python are in _____.
   ii) The Python built-in function for viewing variable types is ______.
   iii) Django supports the _____ pattern.
  iv) a = 5, b = 6
                    a, b = b, a
  print(a,b) is the final output.

v) To convert '5' into int data type command is used.
  vi) Open() function is used for _____.
   vii) a = 10 << 12
                    b=34 >> 10, c=7 \mid 13, d=12 \land 13
                    print(a,b,c,d)
                                               _____is the output.
  viii) To find x<sup>y</sup>, you will use ____ operator.
  ix) A program in python is stored with a ____ extension.
  x) The value of the expression set([1, 1, 2, 3]) is _____
  xi) _____ method is used to delete a file.
  xii) The
                     statement is a combination of an else statement and an if statement.
  xiii) import time
                   a= time.localtime()
                   c = time. asctime(a)
                   print(c)
                                                 _____ is the output.
  xiv) _____ is used to define a block of code in Python language.
  xv) The 13//(4+3\%5) evaluates to _____.
  3. Answer the following questions (any ten)
                                                                                               1 \times 10 = 10
(i) What is a lambda function?
 (ii) What is an Interpreted language?
  iii) What is the purpose of isatty()?
  iv) What are python iterators?
V) What is Scope in Python?
  vi) How to comment multiple lines in python?
  vii) Explain find() function.
  viii) How will you capitalize the first letter of string?
  ix) What is the purpose of flush()?
 x) What are Python's dictionaries?
 xi) How can you generate random numbers?
 xiii) What is PEP 8?
 xiv) What is the purpose of the PYTHONPATH environment variable?
 xv) Is python a case-sensitive language?
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2

- 4. Answer the questions (Any six)
- i) What is slicing?
- ii) What are membership operators?
- iii) Differentiate between continue and break statement.
- iv) Differentiate between globals() and locals()
- v) Name two file built-in functions. Give their syntax.
- vi) What is the difference between Python Arrays and lists?
- vii) Give two ways to convert a number into a string.
- viii) B=3, A=2. Swap the values of these variables.
- ix) How can the ternary operators be used in python?
- x) How do you insert a static file to a template in Django?
- xi) Is Django better than Flask?
- xii) Write a Python code to add the values of two variables.

GROUP-C

6x1

- 5. Answer the question (any one)
- a) Explain the basic data types available in Python with examples. b) What is the difference between list and tuples in Python? What are the key features of Python?
- c) Write a Python program to print the factorial of a number.
- 6. Answer the question (any one)

6x1

- a) What is difference between module and package? Is pandas a module or package?
- b) Explain different types of loops available in Python with suitable examples.
- c) Write a python program to check whether the number given is a palindrome or not.
- 7. Answer the question (any one)

6x1

- a) What are input and output files? How do you use input and output files in Python?
- b) Write a Python program to calculate the length of a string.
- c) Write a python function to print multiplication table from 1 to 10.